SL-HF100ES
RMT-216

SERVICE MANUAL

Betamax
Beta Hi-fi PAL
SONY

April, 1984

711B CHASSIS

Refer to separate adjustment manual, part number 9-972-308-81.

SPECIFICATIONS

System

Video recording system	Rotary two-head helical scanning
Audio recording system	Beta hi-fi PAL system (2 channels) (Recording on the conventional audio track is monaural.)
Video signal	CCIR standards, PAL and DDR SECAM colour
Aerial input	75-ohm, asymmetrical aerial socket
Stereo/bilingual system	West-German two-carrier system
Channel coverage	VHF: Western European channels E2-E12 UHF: Western European channels E21-E68 (Up to 12 programmes can be preset.)
RF output signal	UHF channels E30 to E39 (variable) 75 ohms, unbalanced

Video

Input	VIDEO IN: BNC connector 1.0 V $^{+1.0}_{-0.5}$ V (p-p) 75 ohms, unbalanced, sync negative
Output	VIDEO OUT: BNC connector 1.0 V (p-p) ±0.1 V (p-p) 75 ohms, unbalanced, sync negative
Horizontal resolution	260 lines
Signal-to-noise ratio	Colour: Better than 40 dB B/W: Better than 43 dB

Audio

Input	AUDIO IN: phono jacks 47 kilohms, −10 dBs (0 dBs = 0.775 V rms)
Outputs	AUDIO OUT: phono jacks Load impedance less than 10 kilohms −10 dBs with 47 kilohms load, unbalanced PHONES: stereo minijack −26 dBs, 8 ohms

Beta hi-fi PAL sound

Frequency response	20 Hz to 20 kHz (MPX FILTER OFF)
Wow and flutter	Less than 0.005% WRMS
Dynamic range	More than 80 dB

Video/Audio

Output	AV: 6-pin DIN connector

— Continued on next page —

Beta

VIDEO CASSETTE RECORDER

SONY®

MICROFILM

Consumer VIDEO

Tape transport

Tape speed	18.73 mm/sec.
Maximum recording time	2 hours 10 min. (with Sony L-500 cassette) 3 hours 15 min. (with L-750)
Fast forward/rewind time	Within 5 min. (with L-500)

Timer

Clock	Crystal lock
Time indication	24-hour cycle
Timer setting	Only for recording 2 events/week, adjustable for any day or for all 7 days of the week
Power back-up	Back-up duration of 3 minutes minimum at one time

General

Power requirements	110 - 240 V ac ±10%, 50/60 Hz
Power consumption	38 W
Storage temperature	−20°C to +65°C (−4°F to +149°F)
Operating temperature	5°C to 40°C (41°F to 104°F)
Dimensions	Approx. 430 × 105 × 380 mm (w/h/d) (17 × 4¼ × 14¼ inches) including projecting parts and controls
Weight	Approx. 10.5 kg (23 lbs 2 oz) net

Accessories supplied

75-ohm coaxial cable for recorder to TV connection	1
Remote Commander RMT-216 with two IEC designation R6 batteries	1
RF channel adjustment tool	1

Design and specifications subject to change without notice.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

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SECTION 1
GENERAL

1-1. WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

1-2. PRECAUTIONS

On safety

- This unit operates on 110 - 240 V ac, 50/60 Hz.
- Should any solid object or liquid fall into the cabinet, turn off the unit and have it checked by qualified personnel before operating it any further.
- To disconnect the mains lead (ac power cord), pull it out by the plug. Never pull the lead itself.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation grille.
- Do not install the unit near heat sources such as radiators or air ducts or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- The unit is designed for operation in a horizontal position. Do not install it in an inclined position.
- Keep the unit and cassette tapes away from equipment with strong magnets, such as a microwave oven, large loudspeakers, etc.

On operation

- When the unit is not to be used for a long period, turn off the POWER switch on the rear to conserve energy and to extend the useful life of your unit.
- Remove and store video cassettes after recording or playback.

On cleaning

Clean the cabinet, panel and controls with a dry soft cloth. Do not use a moistened cloth or any type of solvent, such as alcohol or benzine, which might damage the finish.

On repacking

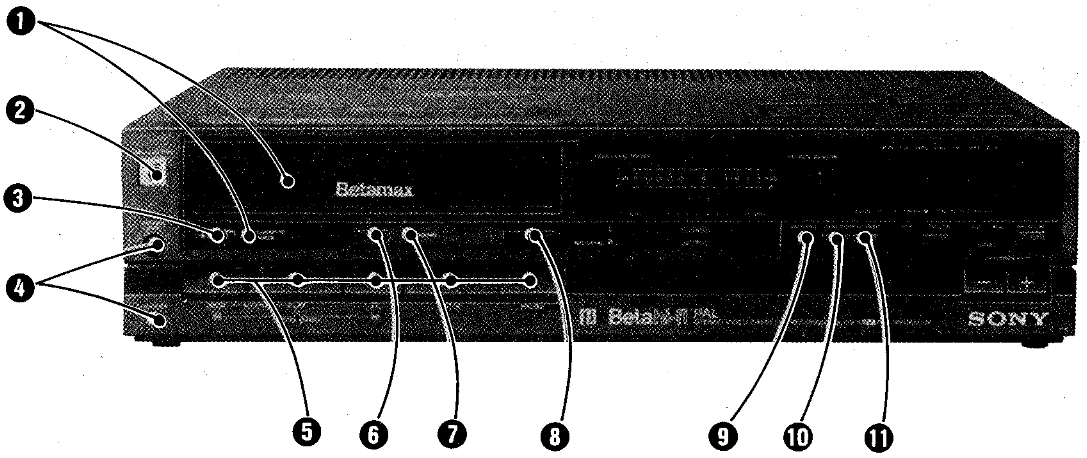
Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

On colour broadcasting systems

This machine is designed to record and playback using the PAL and DDR SECAM colour standards. Recording and playback of video sources based on other colour systems cannot be guaranteed.

1-3. LOCATION AND FUNCTION OF CONTROLS

Front



❶ Cassette compartment and CASSETTE INSIDE lamp
Insert a cassette after turning on the recorder. The lamp lights up when a cassette is inside.

❷ ON/STANDBY button and lamp
Press to turn on the unit. The lamp will light up. Press again to turn it off.
The timer section will continue to operate and the time will be displayed even if the ON/STANDBY button is off so long as the POWER switch is depressed (ON).

❸ ≜ EJECT button
Press to remove the cassette. This button does not function when the recorder is turned off.

❹ PHONES jack and PHONES LEVEL control
Connect headphones to the PHONES jack (stereo mini-jack) to monitor the sound. The PHONES LEVEL control adjusts the headphone volume.

❺ Function buttons

- ◀◀ REW button : Press to rewind the tape. Also used for the reverse picture search and skip scan operation.
- ▶ PLAY button : Press to play the tape back.
- ▶▶ FF button : Press to advance the tape rapidly. Also used for the forward picture search and skip scan operation.
- ■ STOP button : Press to stop the tape.
- ❚❚ PAUSE button : Press to stop the tape for a moment during recording or playback. A still picture will be seen during playback. Press again to release the pause mode.

❻ Beta hi-fi lamp
Lights to show Beta hi-fi recording, or playback of a Beta hi-fi recorded tape regardless of the BETA Hi-Fi selector's position.

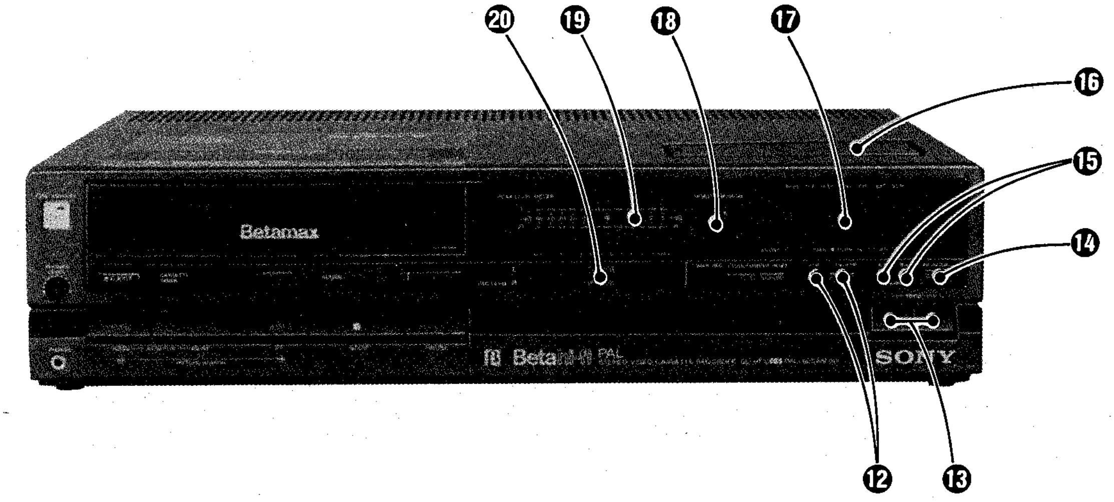
❼ SOUND lamp
When the RECORD mode selector is set to SOUND, this lamp lights to show audio recording. It also lights when a tape with audio signals only is being played back.

❽ RECORD button and lamp
Press to start recording. The lamp will light up.

❾ TIMER REC lamp
Lights when the TIMER REC button behind the front panel is pressed to set the recorder in the timer stand-by mode. It remains lit till the timer recording is finished.

❿ CLOCK/COUNTER button
Press to set the display to the tape counter. To reset to clock, press it again.

⓫ RESET button
Press to set the tape counter reading to "0000".



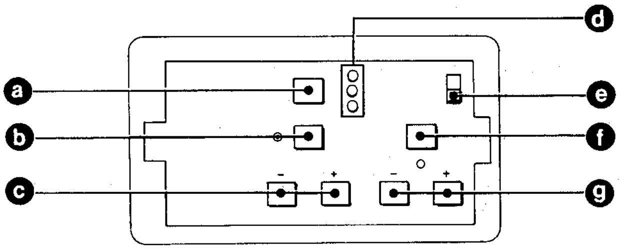
⑫ TV/VTR select button and VTR lamp (behind the front panel)
This button is operable when a TV is connected to the recorder's AV connector.
To view a TV programme selected by the PROG buttons on the recorder or to monitor the picture being recorded, press this button so that the VTR lamp lights up. When the PLAY button on the recorder is pressed, the recorder is automatically set in the VTR mode. To view a TV programme in the usual manner, press this button so that the lamp goes off. When the recorder is turned off, the recorder is automatically set in the TV mode.

⑬ PROG (programme) select buttons
Select the number of the programme to be recorded or to be viewed. Press + for higher-numbered programmes, and – for lower-numbered programmes. The selected programme number will appear in the display window.

⑭ BILINGUAL select button
Selects the language of the bilingual TV programme.

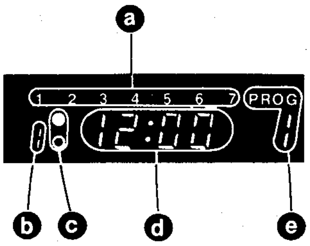
⑮ STEREO A, B lamps
When a stereo TV programme is being received, both lamps light up. When a bilingual programme is being received, either A or B lamp lights up. These lamps do not activate when a pre-recorded stereo or bilingual tape is played.

⑯ Tuning compartment
All the switches and buttons for programming stations are in this compartment.



- ⓐ **RESET button:** To clear the programmed station, press this button.
- ⓑ **AFT button and lamp:** The AFT circuit activates automatically after the stations are tuned and memorized with automatic and manual programming. The AFT lamp will illuminate. If you wish to restore the AFT on the channel which has been fine-tuned manually with the FINE buttons, press the AFT button.
- ⓒ **FINE + and – buttons:** Press to fine tune the station.
- ⓓ **Tuning indicator:** Indicates the approximate position of the tuned station within the tuning band scanned.
- ⓔ **TEST SIGNAL switch:** Set to ON to obtain a test pattern.
- ⓕ **AUTOMATIC PROGRAMMING button and lamp:** To preset the receivable stations automatically, press this button. The corresponding lamp blinks during automatic and manual programming.
- ⓖ **SEARCH + and – buttons:** Press to tune in a station. Press the – button to get a station of lower frequency and the + button to get a station of higher frequency.

⑰ Display window



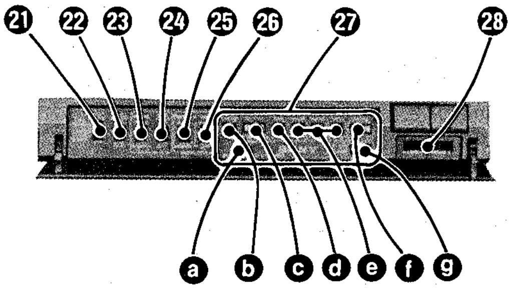
- ⓐ **Day of the week indication:** Shows the day of the week on which the timer-activated recording will take place.
- ⓑ **Event number**
- ⓒ **Turn-on and turn-off setting indications:** The "●" mark shows you are setting the turn-on time and the "O" mark shows the turn-off time.
- ⓓ **Time and counter display:** Usually shows the present time.
  When the CLOCK/COUNTER button is pressed to COUNTER, the display shows the counter number.
- ⓔ **Programme number:** Shows the programme number selected with the PROG buttons.
  When the INPUT SELECT switch is set to LINE/CAMERA to record signals from the VIDEO IN and AUDIO IN jacks, the indication will change to "AU".

⑱ REMOTE SENSOR
Detects the remote control signal transmitted from the supplied Remote Commander.

⑲ PEAK LEVEL METER
When the LEVEL METER switch is set to ON, these meters show the peak input level of each channel (left and right) during Beta hi-fi recording, and recording levels during playback.

⑳ REC LEVEL (recording level) controls
These controls adjust the audio recording level on the Beta hi-fi recording. The R control is for the right channel, and L is for the left channel. Normally set to 5 (green position) for recording TV programmes. When you are recording audio signals from other audio equipment, adjust manually to the correct position for the optimum result.

Behind front panel



㉑ INPUT SELECT switch
Select the programme to be recorded.
LINE/CAMERA: for recording signals connected to the VIDEO IN and AUDIO IN jacks.
TUNER: for recording TV programmes.
SIMUL: for recording FM simulcast programmes or timer-activated audio recording.

㉒ LEVEL METER switch
Set to ON to illuminate the peak level meters. Set to OFF to turn the illumination off.

㉓ RECORD mode selector
VIDEO: Normally, set to this position. Sound and picture are recorded on the Beta hi-fi system.
SOUND: Set to this position to record sound only with the Beta hi-fi system.

㉔ MPX FILTER (multiplex filter) switch
Normally set to ON for Beta hi-fi recording. The multiplex filter cuts off the high-frequency signals which sometimes grate on the ear. If you wish to record without cutting the high frequencies, set to OFF.

㉕ BETA Hi-Fi selector
Selects the video track or the audio track for sound playback.
AUTO: Normally, set to this position. The recorder will automatically select the video track for Beta hi-fi recorded tapes, or the audio track for tapes recorded without the Beta hi-fi system.
NORMAL: Set to this position when you wish to listen to the sound recorded on the audio track of a Beta hi-fi recorded tape.

㉖ TONE selector
This selector is only effective with sound recorded on the audio track. Normally, set to HIGH. If the high frequencies of playback sound seem exaggerated, set to LOW.

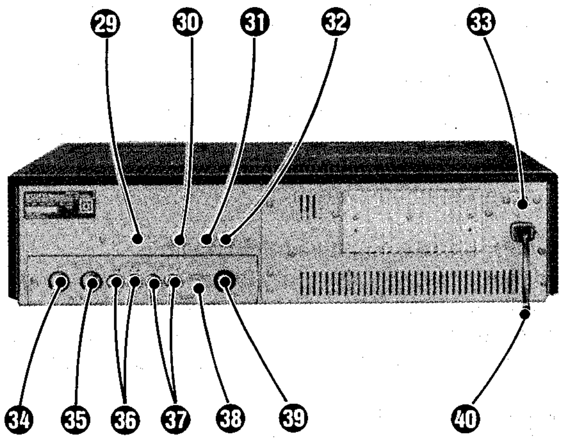
㉗ Timer setting section

- ⓐ **CLOCK SET button:** Press to set the clock.
- ⓑ **CLEAR button:** Press to clear the timer programme memorized.
- ⓒ **TIMER SET button:** Press to set the turn-on/off time of a recording.
- ⓓ **DAY button:** Press to set the turn-on day of a recording.
- ⓔ **HOUR, 10 MIN and MIN buttons:** Press to set the turn-on/off time of a recording.
- ⓕ **PROG button:** Press to select the TV programme to be recorded by the timer.
- ⓖ **TIMER REC button:** Press to set the recorder in the timer recording stand-by mode.

㉘ TRACKING control

If streaks or snow appear during the playback of a tape recorded on another recorder, turn this knob to obtain the best possible picture.

Rear



㉙ RF CHANNEL screw

If there is interference on the factory-preset channel for RF output and the signal of this recorder cannot be displayed clearly on the TV screen, adjust this screw with the supplied screwdriver.

㉚ AERIAL OUT socket

Connect the aerial input of the TV receiver using the supplied cable.

㉛ DX/LOCAL switch

Normally set this switch to DX. If the TV signal is very strong, set the switch to LOCAL.

㉜ AERIAL IN socket

Connect the aerial cable.

㉝ POWER switch

This is the mains power on/off switch. Keep this switch depressed so that the clock and timer section will remain active even after the ON/STANDBY button is off. When this switch is released (OFF), the preset time and timer settings are all cleared.

㉞ VIDEO OUT jack (BNC type)

Connect to the video input of another video cassette recorder or a video monitor.

㉟ VIDEO IN jack (BNC type)

Connect to the video output of a camera, another video cassette recorder, etc.

㊱ AUDIO OUT jacks (phono type)

Connect to the audio inputs of a video monitor or video cassette recorder, or to the auxiliary inputs or tape input of a stereo amplifier.

㊲ AUDIO IN jacks (phono type)

Connect to the audio outputs of a camera or another video cassette recorder, or to the recording outputs of a stereo amplifier.

㊳ CAMERA REMOTE jack (special minijack)

For camera recording, connect an ac adaptor to this jack.

㊴ AV connector (6-pin, DIN)

Connect to the 6-pin or 8-pin DIN connector of a TV receiver or colour monitor. This connector provides the video and audio output signal.

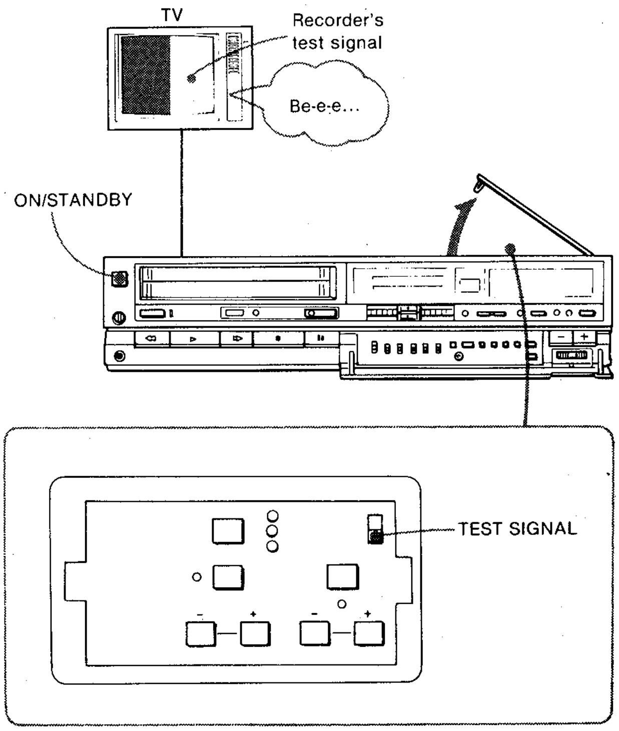
㊵ AC mains lead

1-4. ADJUSTING THE TV

One of the television programme positions must be adjusted to receive the signal from the recorder.

1. After making the connections, press the ON/STANDBY button.
2. Make sure that the recorder is in the stop mode and the TV is in TV mode.
3. Set the TEST SIGNAL switch in the tuning compartment of the recorder to ON. The test signal is transmitted on a channel between UHF channels 30 and 39.
4. Turn on the TV and select a programme position which is not being used to receive a TV station. Tune the channel until you see a clear black and white pattern on the TV screen and you hear a continuous tone. This is the recorder's test signal.

—If you are not sure how to adjust your TV, please refer to the TV's instruction manual or consult your dealer.

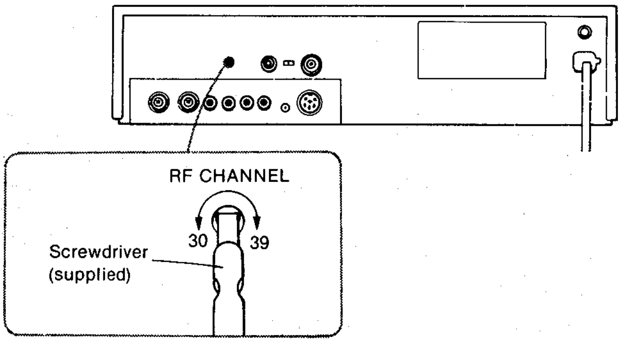


Whenever you use the video recorder, you should set the TV to the programme position selected in this adjustment.

If the test picture is free of disturbance, the TV adjustment is complete. Set the TEST SIGNAL switch to OFF.

If the test picture is not free of disturbance

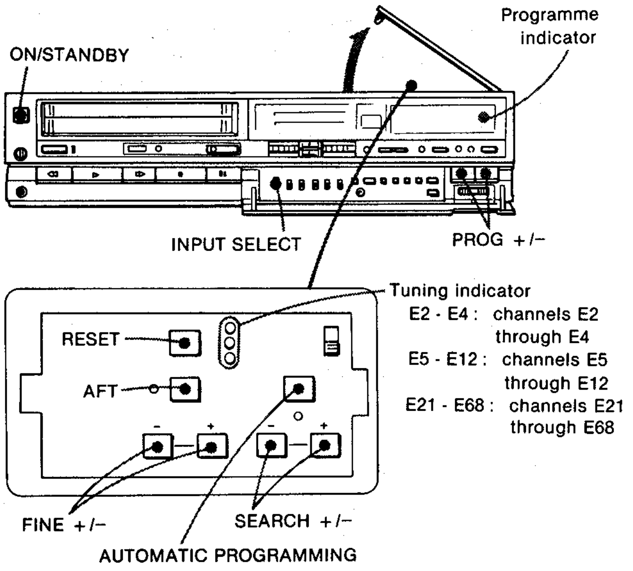
1. Reset the TEST SIGNAL switch to OFF.
2. Adjust the channel of the TV to a channel between UHF channels 30 and 39 with the tuning control or the fine tuning control on the TV, so that the TV screen shows no picture and so that a steady rustling sound or no sound is heard.
3. Set the TEST SIGNAL switch to ON again.
4. Slowly turn the RF CHANNEL screw on the back of the recorder with the supplied screwdriver, until you see an undistorted test pattern on the TV screen.
5. Now the TV adjustment is complete. Reset the TEST SIGNAL switch to OFF.



1-5. TV STATION PROGRAMMING

Automatic and manual programming is available. Automatic programming automatically presets up to 12 receivable stations from the lowest frequency to the highest. Manual programming is useful for presetting selected stations in any desired sequence.

To start programming, turn on the recorder by pressing the ON/STANDBY button and set the INPUT SELECT switch to TUNER.


ON/STANDBY
Programme indicator
INPUT SELECT
PROG +/–
Tuning indicator
E2 - E4 : channels E2 through E4
E5 - E12 : channels E5 through E12
E21 - E68 : channels E21 through E68
RESET
AFT
FINE +/–
SEARCH +/–
AUTOMATIC PROGRAMMING

AUTOMATIC PROGRAMMING

Press the AUTOMATIC PROGRAMMING button. Up to 12 receivable stations will be preset one by one from programme position 1. When no more stations can be located, programme number "1" will light on the programme indicator and automatic programming will stop.

MANUAL PROGRAMMING

1 Press the + or – PROG button to select the programme position.
   + for a higher-numbered programme position
   – for a lower-numbered programme position

2 Press the + SEARCH button to locate a station with higher frequency and the – SEARCH button to locate a station with lower frequency. The tuning indicator will light to show the current tuning band. When a station has been received, the search will stop. Press the + or – SEARCH button again, until the desired station is received.

Repeat these steps for all desired stations.

FINE TUNING OF A WEAK STATION

If the picture on a particular programme position is not acceptable, keep the + or – FINE button pressed until the picture becomes clearer. When either of the FINE buttons is pressed, the AFT of the selected station is deactivated and the AFT lamp goes off. To view this particular station, keep the AFT deactivated. (Do not press the AFT button.)
When other memorized stations are selected, the AFT automatically activates.

ELIMINATING NOISE ON UNUSED PROGRAMME POSITIONS

Simply press the RESET button. The annoying noise will be eliminated.

1-6. CLOCK SETTING

When you connect the mains lead to a wall outlet, the clock indicates "0:00" with the two dots blinking.

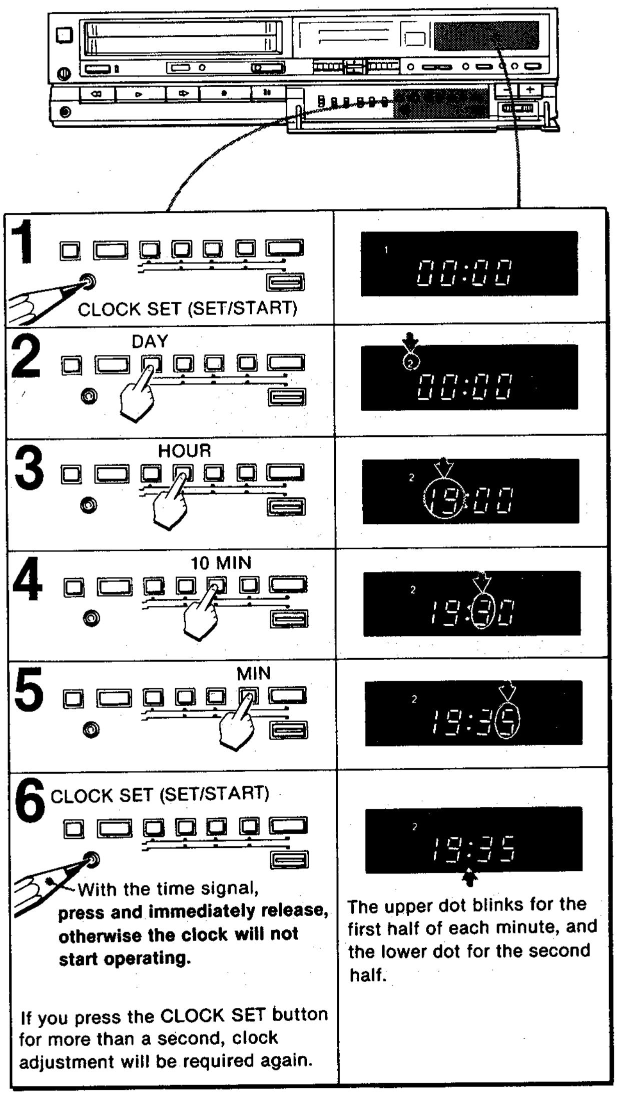
Example: To set the clock to 7:35 p.m. (19:35) on Tuesday*

*** Time indication**

AM				PM					
12:00 (midnight)	1:00		11:00	12:00 (noon)	1:00	2:00		10:00	11:00
↓	↓		↓	↓	↓	↓		↓	↓
0:00	1:00		11:00	12:00	13:00	14:00		22:00	23:00

Day indication

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
↓	↓	↓	↓	↓	↓	↓
1	2	3	4	5	6	7



With the time signal, **press and immediately release, otherwise the clock will not start operating.**

If you press the CLOCK SET button for more than a second, clock adjustment will be required again.

The upper dot blinks for the first half of each minute, and the lower dot for the second half.

The DAY, HOUR, 10 MIN and MIN buttons can be pressed in two ways

When you hold a button down, the digits will advance continuously until the button is released.

When you press and immediately release a button, the digits will advance by one.

Zero second adjustment

Press the CLOCK SET button quickly (less than a second).

While the upper dot is blinking, the clock is set to the time displayed 00 second. For example, if the clock time is 7:30, 20 seconds, it is set to 7:30, 00 second.

While the lower dot is blinking, the clock advances one minute and is set to the time displayed 00 second. For example, if the clock time is 7:30, 40 seconds, it is set to 7:31, 00 second.

If you press the CLOCK SET button for more than a second, "0:00" blinks to show that the clock adjustment is required again.

When power has been interrupted for more than 3 minutes, the time indication "0:00" blinks, showing that the clock must be reset.

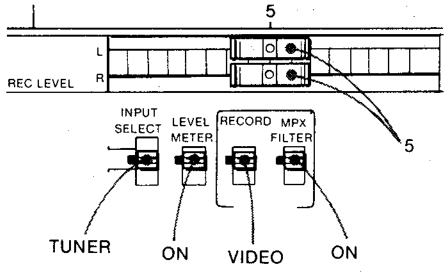
If power has been interrupted for less than 3 minutes, the displayed time remains correct.

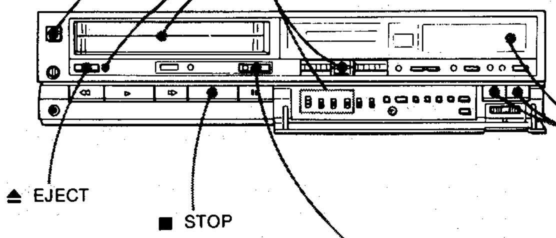
Note: If the POWER switch is released (OFF), the same result will be obtained as in power interruption.

1-7. TV PROGRAMME RECORDING (Beta hi-fi recording)

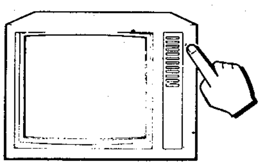
Check before recording

The green position is the standard setting position for Beta hi-fi recording.

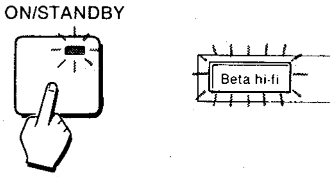

5
L
R
REC LEVEL
INPUT SELECT
LEVEL METER
RECORD
MPX FILTER
5
TUNER
ON
VIDEO
ON



1 Turn on the TV and select the programme position for the video recorder.

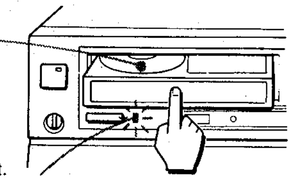


2


ON/STANDBY
Beta hi-fi

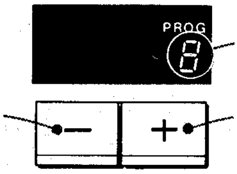
3 Insert the cassette with the round window to the left.

Do not use force when inserting the cassette into the compartment.



Lights when a cassette is inside.

4 Select the programme to be recorded.

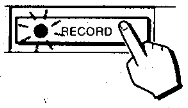


Programme indicator

for lower numbered-programmes

for higher numbered-programmes

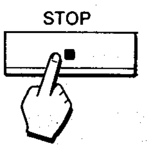
5 Press the RECORD button. Recording will begin.



If the inserted cassette does not have the safety tab, or if the tape is at its end, the cassette will be automatically ejected.

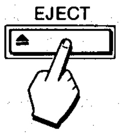
You can view another TV programme while recording, by simply selecting the programme you want to view with the TV's programme selector.

To stop recording



To eject the cassette

Press after stopping the recording.



When the tape reaches the end during recording, it will be automatically rewound to the beginning.

TO STOP RECORDING MOMENTARILY

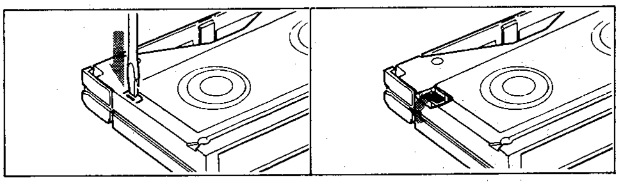
Press the II button. The lamp on the button will light. The TV programme can be seen on the TV, but the picture will not be recorded.
To resume recording, press the II button again.
To protect the video heads and the tape, the pause mode will be automatically released after about 8 minutes and recording will stop.

TO KEEP A RECORDED PROGRAMME FROM BEING ACCIDENTALLY ERASED

When a new recording is made on a previously recorded cassette, the previous recording will be automatically erased.

To avoid erasing a recording
Break off the safety tab using a screwdriver or similar object.

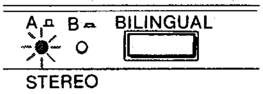
To re-record on a cassette which has had the safety tab removed
Cover the slot with a piece of plastic tape.



RECORDING A STEREO OR BILINGUAL PROGRAMME

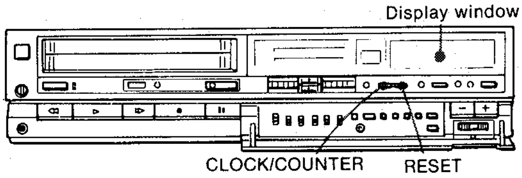
When the STEREO A and B lamps light up, a stereo programme is being received. The recording procedure is the same as in TV programme recording.

If either the A or B lamp lights up, a bilingual programme is being received. Select the local language (usually broadcast on channel A) or the original language (usually broadcast on channel B) with the BILINGUAL select button.



USE OF THE TAPE COUNTER

Turn on the power and press the CLOCK/COUNTER button to display the counter reading in the display window.
To return the display to the present time, press the CLOCK/COUNTER button again.



Before starting recording or playback, press the RESET button to set the counter to "0000".
By noting the counter reading at the desired point, you can easily find that point later by referring to the counter.

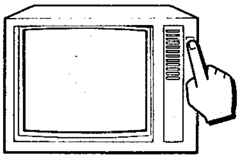
Normal rewinding will stop at the tape counter's "0000" position. To rewind the tape further, press the ◀◀ button again.
With automatic rewinding from the tape end or for "auto play", the tape will not stop at the counter's "0000" position.

Notes

- The counter reading is automatically reset to zero when a cassette is newly inserted.
- While the power is off, the display shows the present time, regardless of the CLOCK/COUNTER button setting.
- The counter reading will be retained in the memory even after the power is turned off, as long as the cassette is in the cassette compartment.
- The tape counter does not operate when a blank, unrecorded tape is played.

1-8. PLAYBACK

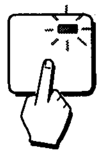
1



Turn on the TV and select the programme position for the video recorder.

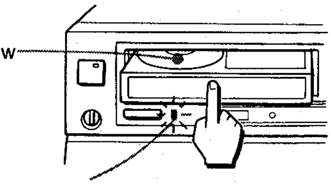
2

ON/STANDBY

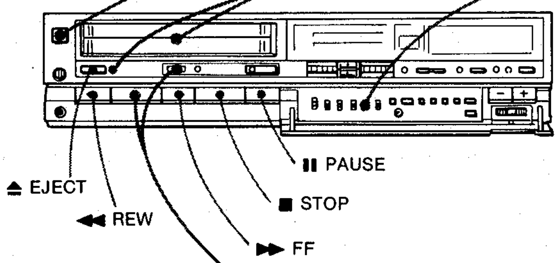


3

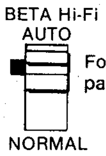
Insert the cassette with the round window to the left.



Lights when a cassette is inside.



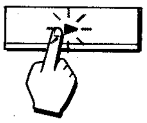
4 Usually set to AUTO.

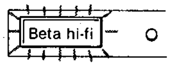


For details, see "Beta HiFi selector" on page 15.

5 Press the ▶ button. Playing will begin.

PLAY

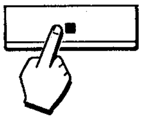




Lights during playback of a Beta hi-fi recorded tape.

To stop playback

STOP

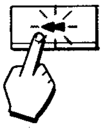


To eject the cassette

EJECT

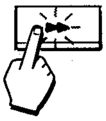
To rewind the tape

REW



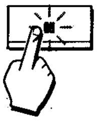
To advance the tape rapidly

FF



To stop the playback momentarily

PAUSE



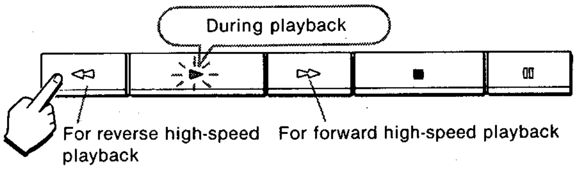
A still picture will be seen on the TV screen. To resume playback, press the button again. The pause mode will be automatically released after about 8 minutes and the playback will resume.

When the tape reaches the end during playback, it will be automatically rewound to the beginning.

PICTURE SEARCH

—Viewing the picture at high speed to find a particular scene

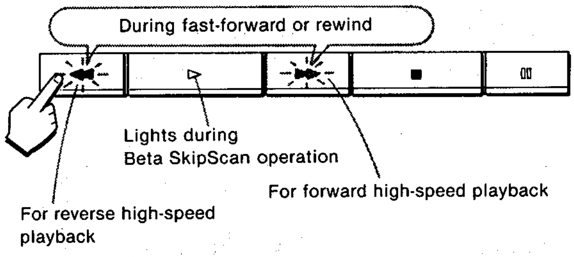
During playback, keep the ◀◀ or ▶▶ button pressed to reverse or advance the picture at high speed. Release the button at the desired point. Normal playback will resume. The picture search mode can also be assured directly from the pause mode.

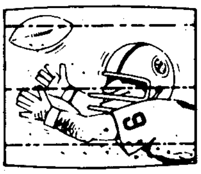

During playback
For reverse high-speed playback
For forward high-speed playback

SKIP SCAN

—Viewing the picture momentarily in the fast-forward or rewind mode

During rewind mode, keep the ◀◀ button pressed for high-speed picture reverse. **During fast forward mode,** keep the ▶▶ button pressed for high-speed picture advance. The picture appears momentarily while either of the buttons is pressed. Release the button at the desired point. Normal rewind or fast forward mode will resume.


During fast-forward or rewind
Lights during Beta SkipScan operation
For forward high-speed playback
For reverse high-speed playback



Streaks will appear during the picture search, the skip scan and the pause modes.

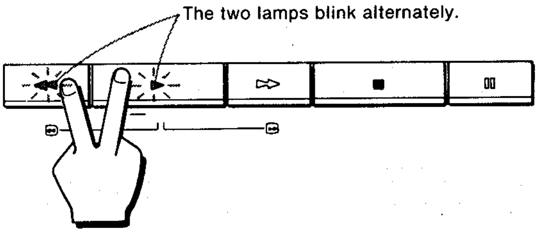
WHEN PLAYING BACK A TAPE RECORDED ON ANOTHER MACHINE

- A tape recorded on a machine without a Beta hi-fi system is played back in the conventional way.
- If streaks or snow appear during playback of a tape recorded on another recorder, adjust the TRACKING control for the best possible picture. Return the control to the centre position after playing back the tape.
- If the sound of a tape recorded on another Beta hi-fi recorder cannot be heard, adjust the TRACKING control.

AUTO PLAY

—To rewind the tape and automatically play it back

Press the ▶ button and ◀◀ button simultaneously in the stop mode. The lamps on these buttons blink alternately during rewinding. After the tape is completely rewound, it will be automatically played back.



SELECTION OF PLAYBACK SOUND

BETA Hi-Fi selector

Normally, set this selector to AUTO. The sound recorded on the video track of Beta hi-fi recorded tapes, or the sound recorded on the audio track of non-Beta hi-fi recorded tapes will automatically be played back.

If you wish to listen to the sound recorded on the audio track of a Beta hi-fi recorded tape, set the selector to NORMAL. Return the selector to AUTO after playing back the tape.

Playback sound and Beta hi-fi lamp

	Beta hi-fi recorded tape		Non Beta hi-fi recorded tape	
BETA Hi-Fi AUTO	Sound on video track (Beta hi-fi recorded)	Beta hi-fi	Sound on audio track	Beta hi-fi
NORMAL	Sound on audio track	Beta hi-fi		

*The Beta hi-fi lamp lights to show that a Beta hi-fi recorded tape is being played back.

TONE selector

This selector is effective only with sound recorded on the audio track. Normally set the selector to HIGH. If the high frequencies of the playback sound seem exaggerated, set to LOW. Return the selector to HIGH after playing back the tape.

1-9. TIMER-ACTIVATED RECORDING OF TV PROGRAMMES

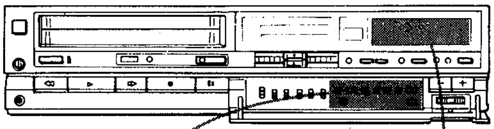
You can make one or two recordings within 7 days even when you are not at home. These recordings are identified as event 1 or event 2.

Note: The timer cannot be set during recording, playback, or when the INPUT SELECT switch is set to LINE/CAMERA (The "AU" appears on the display window).

Example: To record a PROG 2 broadcast from 9:00 AM to 11:25 AM on Friday for event 1.

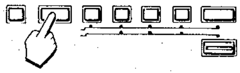
Check before setting the timer

- Is the clock set to the correct day and correct time? Timer setting can only be made after the clock has been set.
- Is a cassette inserted in the recorder?
- Is the cassette long enough to record the programmes?
- Does the cassette have a safety tab on the bottom?
- Is the INPUT SELECT switch set to TUNER?



Button to be pressed | **Time display**

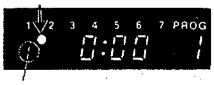
1 TIMER SET



If the recorder is off, it will be turned on automatically.

The segment to be set will blink.

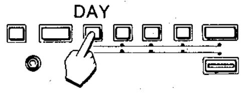
Turn-on indication

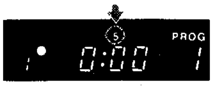


Shows the event number. Event 1 always appears first.

2 Select the turn-on day.

DAY

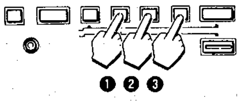


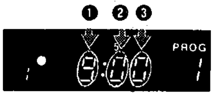


Indication changes as follows :
1234567 (everyday) → 1 (Monday) → 2 (Tuesday)... → 7 (Sunday)

3 Set the turn-on time.

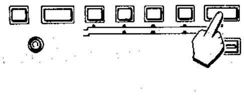
H 10M M

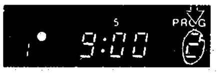




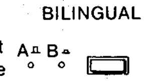
4 Select the programme to be recorded.

PROG

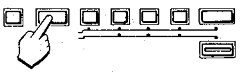




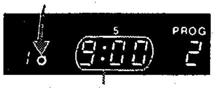
For a bilingual programme, select the language to be recorded.



5 TIMER SET



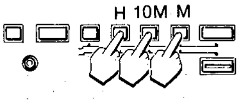
Turn-off indication

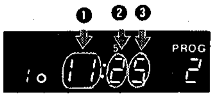


Blinks.

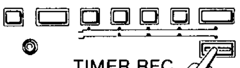
6 Set the turn-off time.

H 10M M



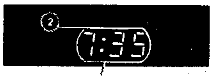


7 TIMER REC



The TIMER REC lamp lights up and the power is turned off.
At the preset turn-on time, recording will start automatically and will stop at the preset turn-off time.

If the inserted cassette is at its end or does not have the safety tab, the cassette will be automatically ejected.



Present day and time

ONCE THE TIMER REC LAMP HAS LIT UP, NO FUNCTION OF THE RECORDER CAN BE ACTIVATED,except for checking the timer setting.
To operate the recorder after setting the timer for recording, press the TIMER REC buton so that the TIMER REC lamp goes off. To reactivate the timer recording standby mode, be sure to press the TIMER REC button again.

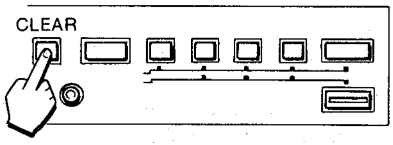
To record to the end of the tape
Set the turn-off time to a time after the tape will reach its end.

If the tape reaches the end during the timer recording
The recording will stop and the tape will be rewound to the beginning. Then after about a second, the recorder will be turned off.

To stop the on-going timer recording
Press the TIMER REC button so that the TIMER REC lamp goes off. The unit will be turned off automatically after about a second.

To erase the setting of an event

1 Press the TIMER SET button to display the event to be erased.
2 Press the CLEAR button. This event will be erased from the memory.



When a power interruption occurs before or during timer recording

If the clock shows "0 : 00" and the dots blink
All the timer settings have been erased. Reset the clock time and the timer settings.

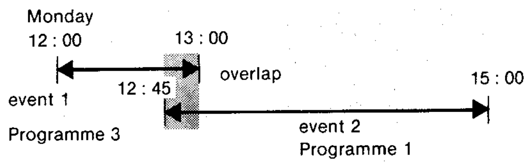
If the clock still shows the correct time but the dots blink
The power has been interrupted for less than 3 minutes. The timer programmes are retained in the memory and the on-going timer recording will resume when the power is resupplied.
To stop the blinking, press any button in the timer-setting compartment.

ERROR INDICATIONS

If the ● and ○ indications as well as the event numbers blink when the TIMER REC button is pressed...
It means that the setting of these events overlap. Check the settings and eliminate the overlap.

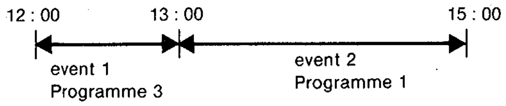
Example :

Timer setting



Even with this error indication, recording can be made.
In this case, the first preset recording continues to its turn-off point and then the next recording begins.

Realized recording



If the turn-on time of the 2 events is the same, recording of event 1 will be made.

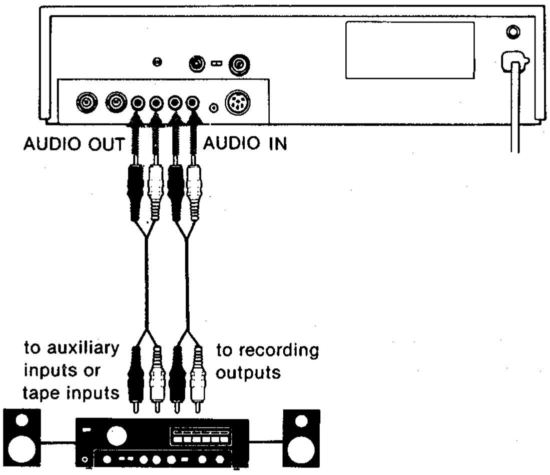
TO CHECK THE TIMER SETTING

Press the TIMER SET button. Each time you press the button, the indication will change as follows:
Example : Both event 1 and 2 have been programmed.
Turn-on day and time of event 1 → Turn-off day and time →Turn-on day and time of event 2 → Turn-off day and time →Present time
During actual timer recording, only the turn-off time of the event being recorded can be checked.

1-10. BETA HI-FI AUDIO RECORDING

You can record only audio signals without recording pictures.

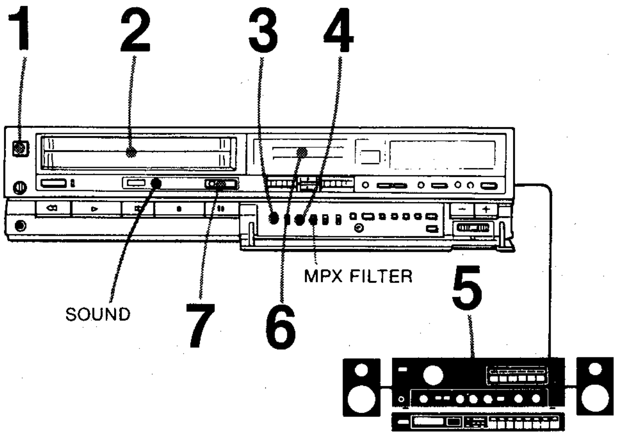
CONNECTION TO AN AUDIO SYSTEM



stereo amplifier, receiver, etc.

Note
When the TV aerial input socket is connected to the recorder AERIAL OUT socket, the recorded TV programme's sound may not be heard if pictures are not recorded on the tape. Listen to the sound through the equipment connected to the AUDIO OUT jacks.

TO RECORD FROM THE AUDIO SYSTEM



1 Press the ON/STANDBY button.
2 Insert a cassette.
3 Set the INPUT SELECT switch to LINE/CAMERA.
4 Set the RECORD mode selector to SOUND.
The SOUND lamp lights to show audio recording.
5 Turn the power on and play the programme source to be recorded.
6 Set the LEVEL METER switch to ON, and adjust the recording level with the REC LEVEL controls.
(See "RECORDING LEVEL ADJUSTMENT" on page 19.)
7 Press the RECORD button. Recording will begin.

MPX FILTER (multiplex) switch
When recording from an FM tuner, set this switch to ON to cut off the high- frequency signals which sometimes grate on the ear. To record without cutting the high frequencies, set this switch to OFF.

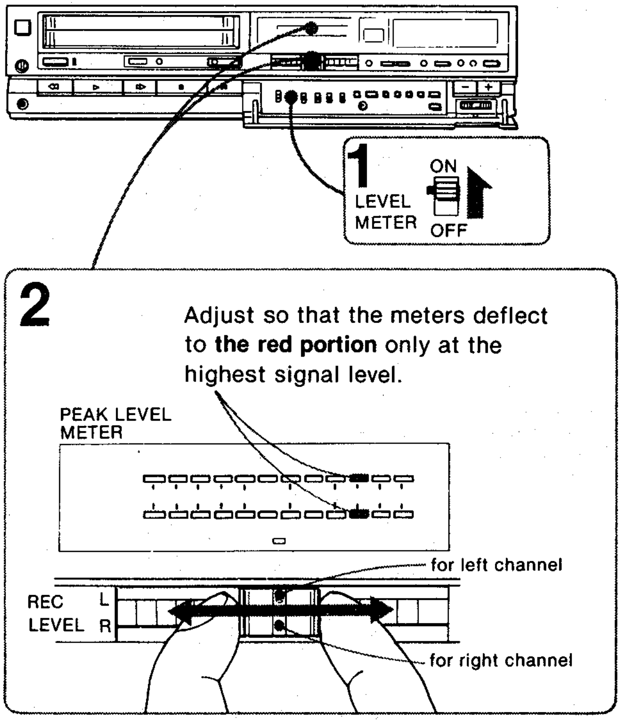
RECORDING LEVEL ADJUSTMENT

When recording on the Beta hi-fi system, the recording level of the left and right channels can be adjusted with the REC LEVEL controls.

In most cases, when you record TV programme sound, the proper recording level is obtained by setting the REC LEVEL controls at 5 (green position).

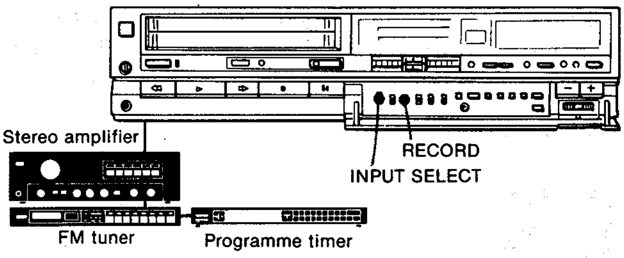
When you record a sound source with a wide dynamic range, manually adjusting the recording level may result in a better recording.

If the recording level setting is too high, the sound will be distorted, and if the setting is too low, a noisy recording will result. The recording level should be set as high as possible while avoiding distortion.


1
ON
LEVEL
METER
OFF
2
Adjust so that the meters deflect to **the red portion** only at the highest signal level.
PEAK LEVEL
METER
for left channel
REC L
LEVEL R
for right channel

TIMER-ACTIVATED AUDIO RECORDING

Use an optional programme timer for turning on/off the audio system.


Stereo amplifier
RECORD
INPUT SELECT
FM tuner
Programme timer

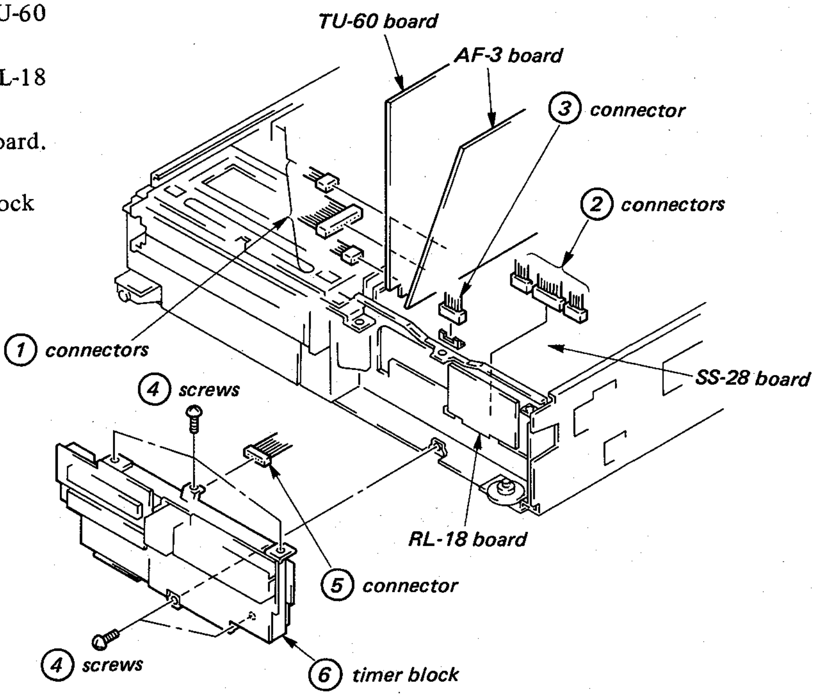
1 Make sure that the clock built into the recorder and the programme timer clock are set to the correct day and time.
2 Set the INPUT SELECT switch of the recorder to SIMUL.
3 Set the RECORD mode selector to SOUND.
4 Preset the turn-on day and time, and the turn-off time in both timers.
For presetting the recorder timer, see page 16.

At the preset turn-on time, audio recording will start automatically and will stop at the preset turn-off time.

2-3. TIMER BLOCK REMOVAL

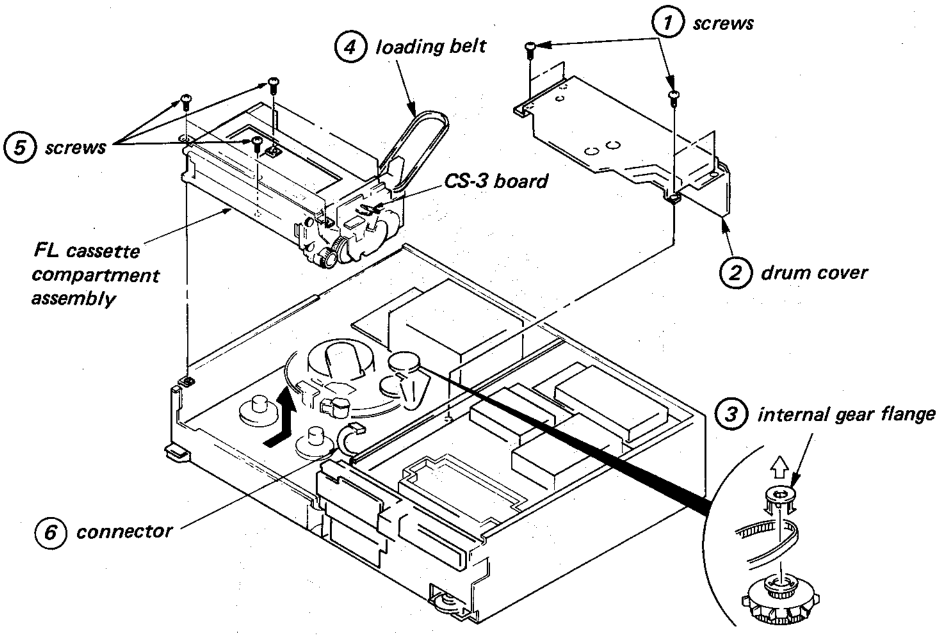
1) Pull out the three connectors ① from the TU-60 board.
2) Pull out the three connectors ② from the RL-18 board.
3) Pull out the connector ③ from the SS-28 board.
4) Remove the five screws ④.
5) Pull out the connector ⑤ from the timer block side (TM-54 board).
6) Remove the TM block ⑥.

TU-60 board (CN003, 101, 102)
RL-18 board (CN801, 802, 803)
SS-28 board (CN602)
TM-54 board (CN104)


TU-60 board
AF-3 board
③ connector
② connectors
① connectors
④ screws
SS-28 board
RL-18 board
⑤ connector
④ screws
⑥ timer block

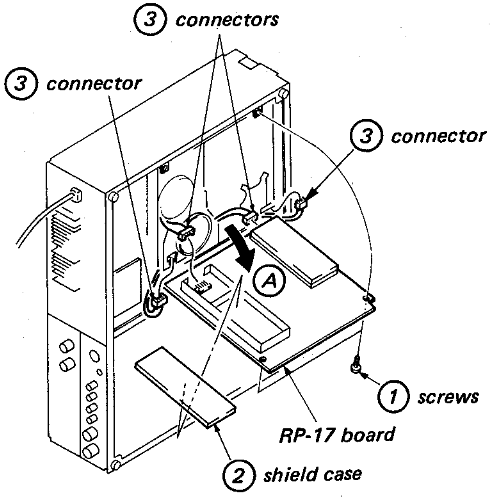
2-4. FL CASSETTE COMPARTMENT ASSEMBLY REMOVAL

1) Remove the four screws ① and the drum cover ②.
2) Remove the internal gear flange ③.
3) Loosen the loading belt ④ exerting a force on the threading motor.
4) Remove the five mounting screws ⑤ of the FL cassette compartment.
5) Pull out the connector ⑥ from the CS-3 board.
6) Lift the FL cassette compartment assembly in the direction shown by the arrow to remove.


① screws
④ loading belt
⑤ screws
CS-3 board
FL cassette compartment assembly
② drum cover
③ internal gear flange
⑥ connector

2-5. REMOVAL OF MECHANICAL CHASSIS BLOCK (1)

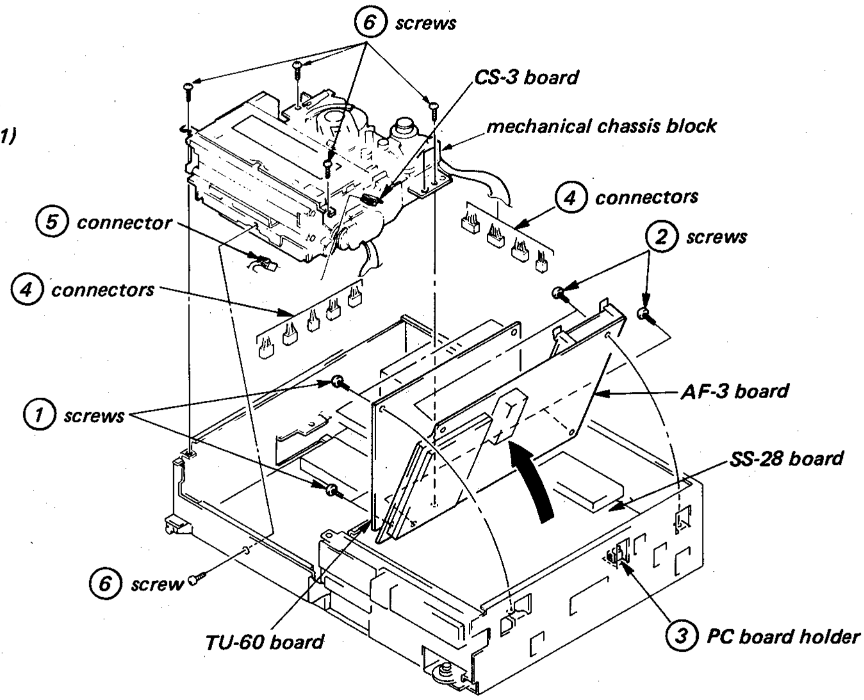
1) Stand the set with the right side panel on the bottom.
2) Remove the two screws ① holding the RP-17 board.
3) Remove the RP-17 board in the direction shown by the arrow Ⓐ.
4) Remove the shield case ②.
5) Pull out the four connectors ③.


③ connectors
③ connector
③ connector
Ⓐ
① screws
RP-17 board
② shield case

2-6. REMOVAL OF MECHANICAL CHASSIS BLOCK (2)

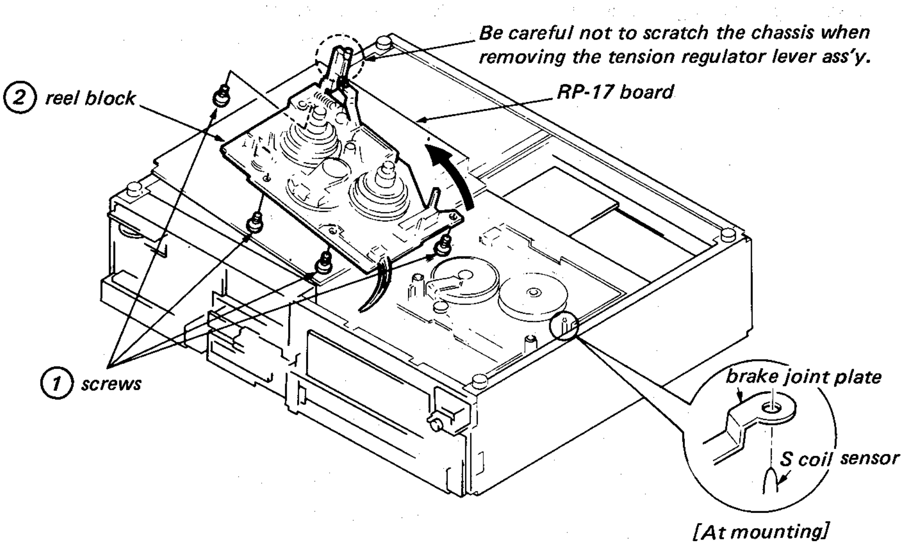
1) Remove the four screws ① and the TU-60 board in the direction shown by the arrow.
2) Remove the four screws ②.
3) Remove the claw of PC board holder ③ and the AF-3 board in the direction shown by the arrow.
4) Pull out the thirteen connectors ④ from the SS-28 board and pull out the rest one from AM-5 board.
5) Pull out the connector ⑤ from CS-3 board.
6) Remove the six screws ⑥ and the mechanical chassis block.

SS-28 board (CN001, 002, 004, 301, 303, 307
603, 604, 605, 607, 608, 610, 611)
AM-5 board (CN503)
CS-3 board (CN301)


⑥ screws
CS-3 board
mechanical chassis block
④ connectors
② screws
⑤ connector
④ connectors
AF-3 board
① screws
SS-28 board
⑥ screw
TU-60 board
③ PC board holder

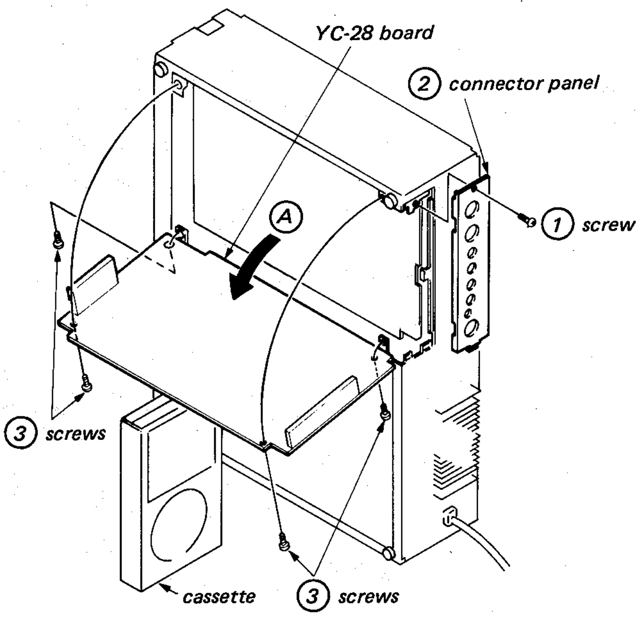
2-7. REEL ASS'Y REMOVAL

1) Place the set upside down.
2) Remove the four screws①.
3) Remove the reel block②.


Be careful not to scratch the chassis when removing the tension regulator lever ass'y.
② reel block
RP-17 board
① screws
brake joint plate
S coil sensor
[At mounting]

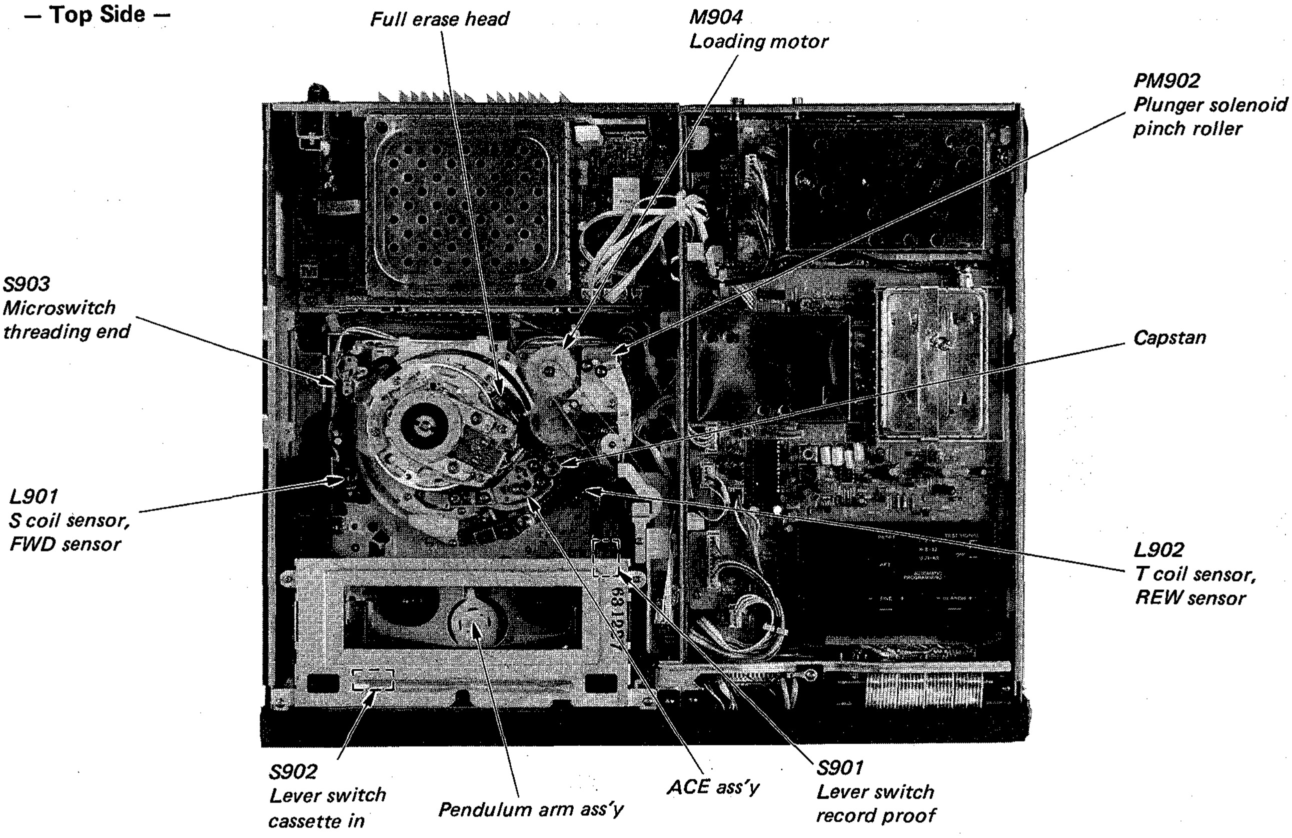
2-8. THE YC-28 BOARD REMOVAL

1) Stand the set with the left side panel on the bottom.
2) Remove the screw①and the connector panel②.
3) Remove the four screws ③ holding the YC-28 board.
4) Swing open the YC-28 board in the direction shown by the arrow Ⓐ and rest it on a cassette.

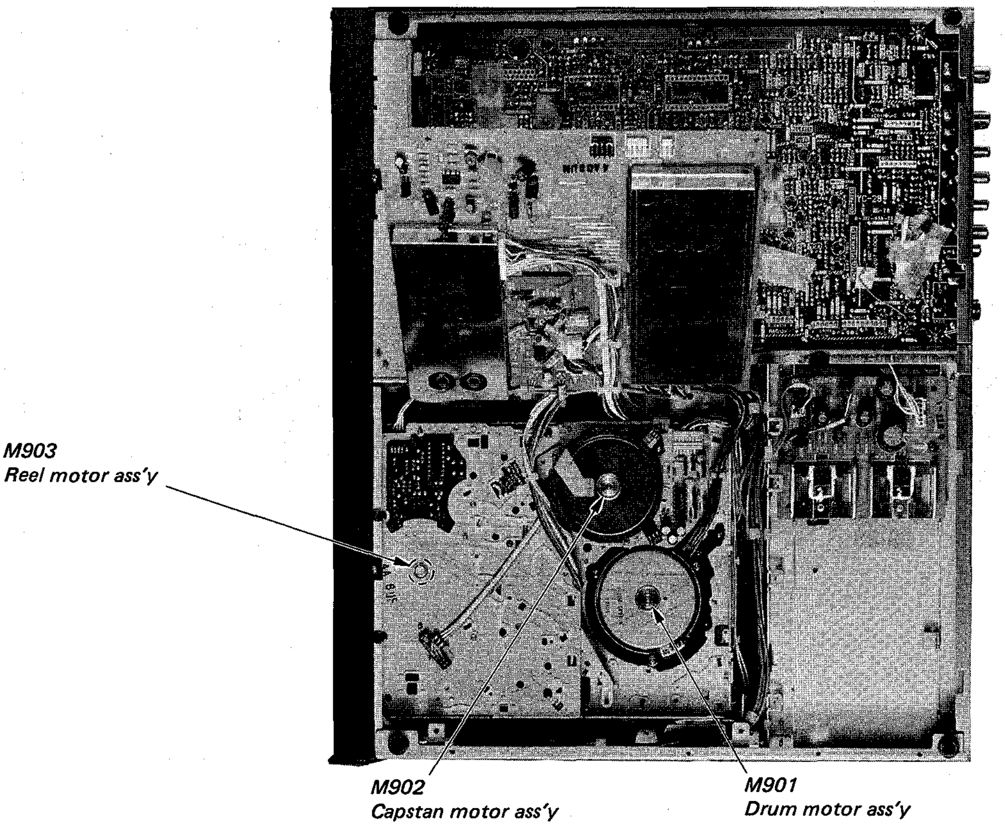

YC-28 board
② connector panel
Ⓐ
① screw
③ screws
cassette
③ screws

2-9. INTERNAL VIEW

— Top Side —

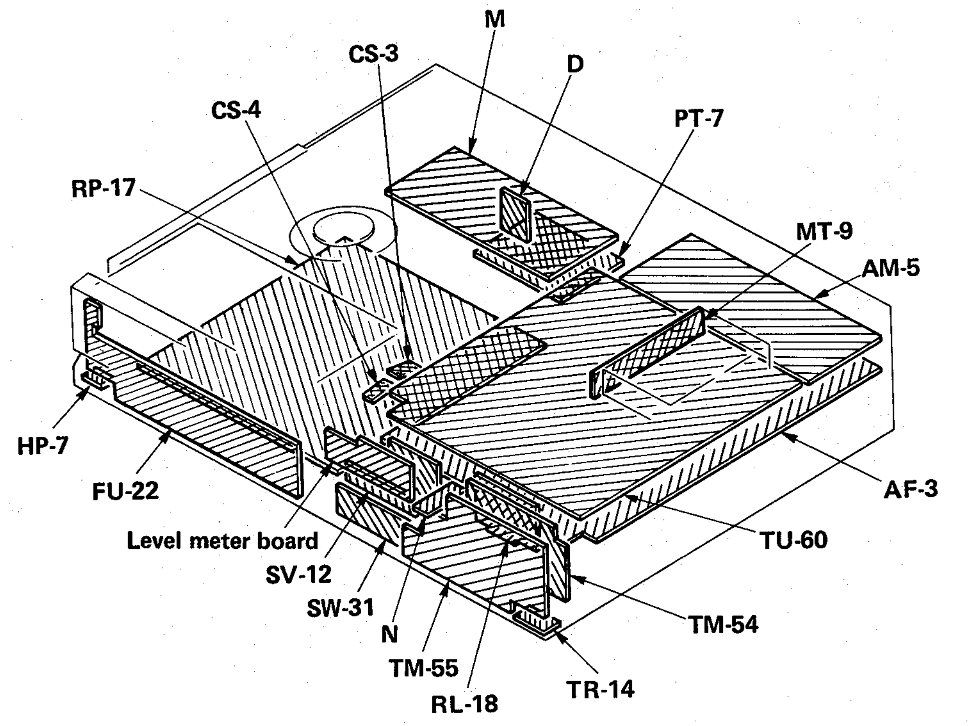

Full erase head
M904
Loading motor
PM902
Plunger solenoid pinch roller
S903
Microswitch threading end
Capstan
L901
S coil sensor, FWD sensor
L902
T coil sensor, REW sensor
S902
Lever switch cassette in
Pendulum arm ass'y
ACE ass'y
S901
Lever switch record proof

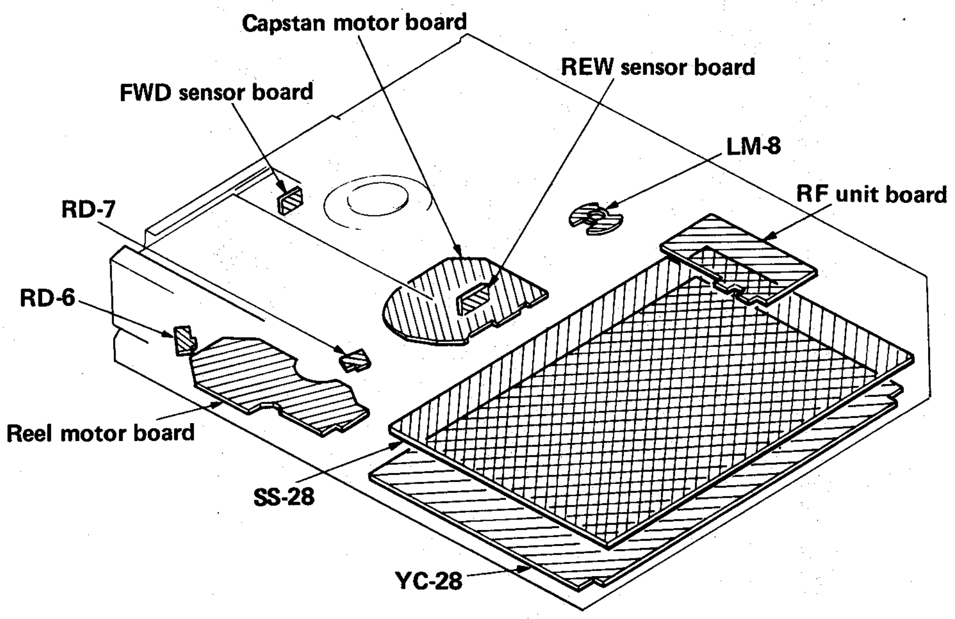
— Bottom Side —


M903
Reel motor ass'y
M902
Capstan motor ass'y
M901
Drum motor ass'y

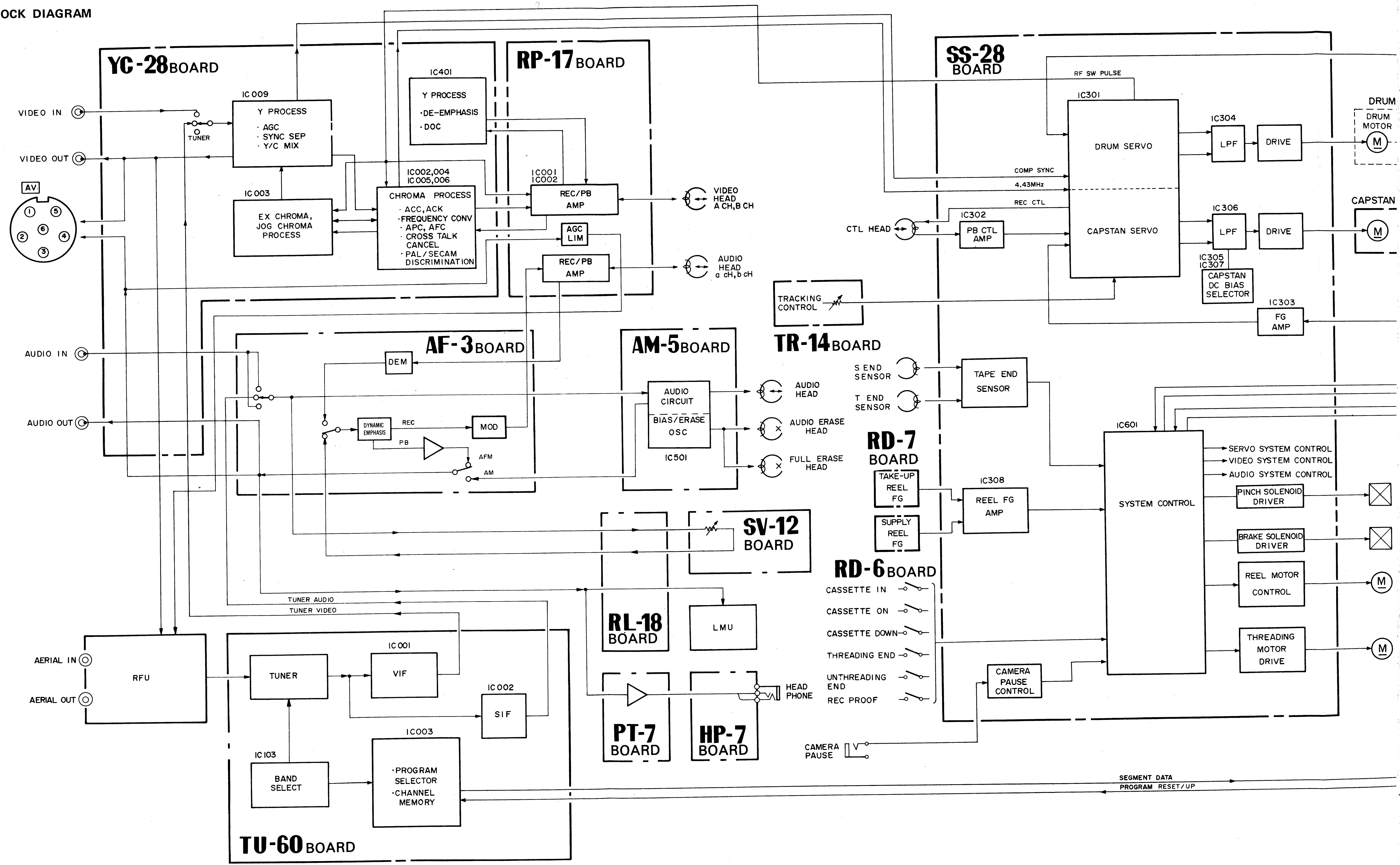
SECTION 3
DIAGRAMS

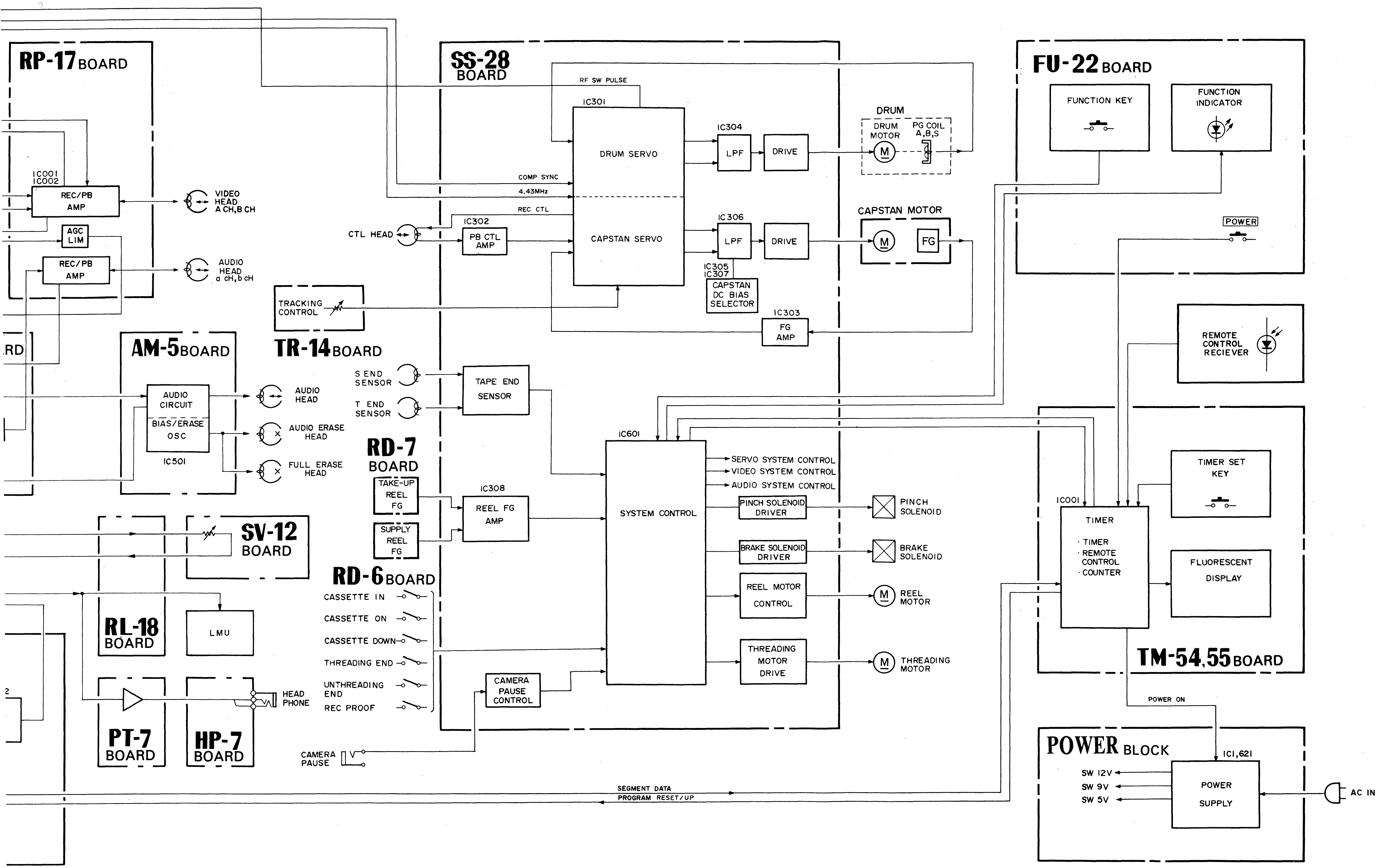
3-1. CIRCUIT BOARDS LOCATION


M
CS-3
D
CS-4
PT-7
RP-17
MT-9
AM-5
HP-7
FU-22
AF-3
Level meter board
TU-60
SV-12
SW-31
TM-54
N
TM-55
TR-14
RL-18

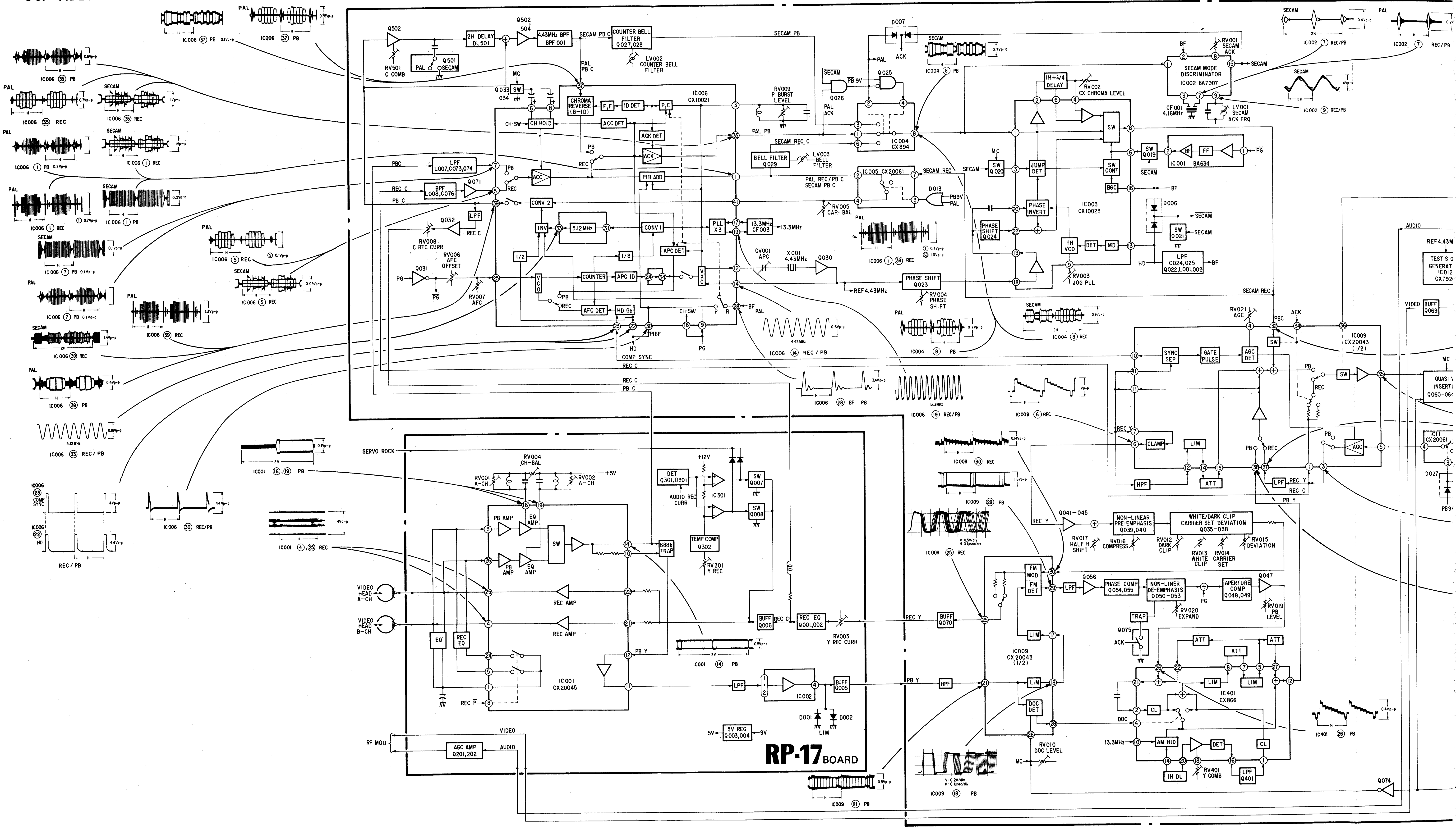

Capstan motor board
REW sensor board
FWD sensor board
LM-8
RF unit board
RD-7
RD-6
Reel motor board
SS-28
YC-28

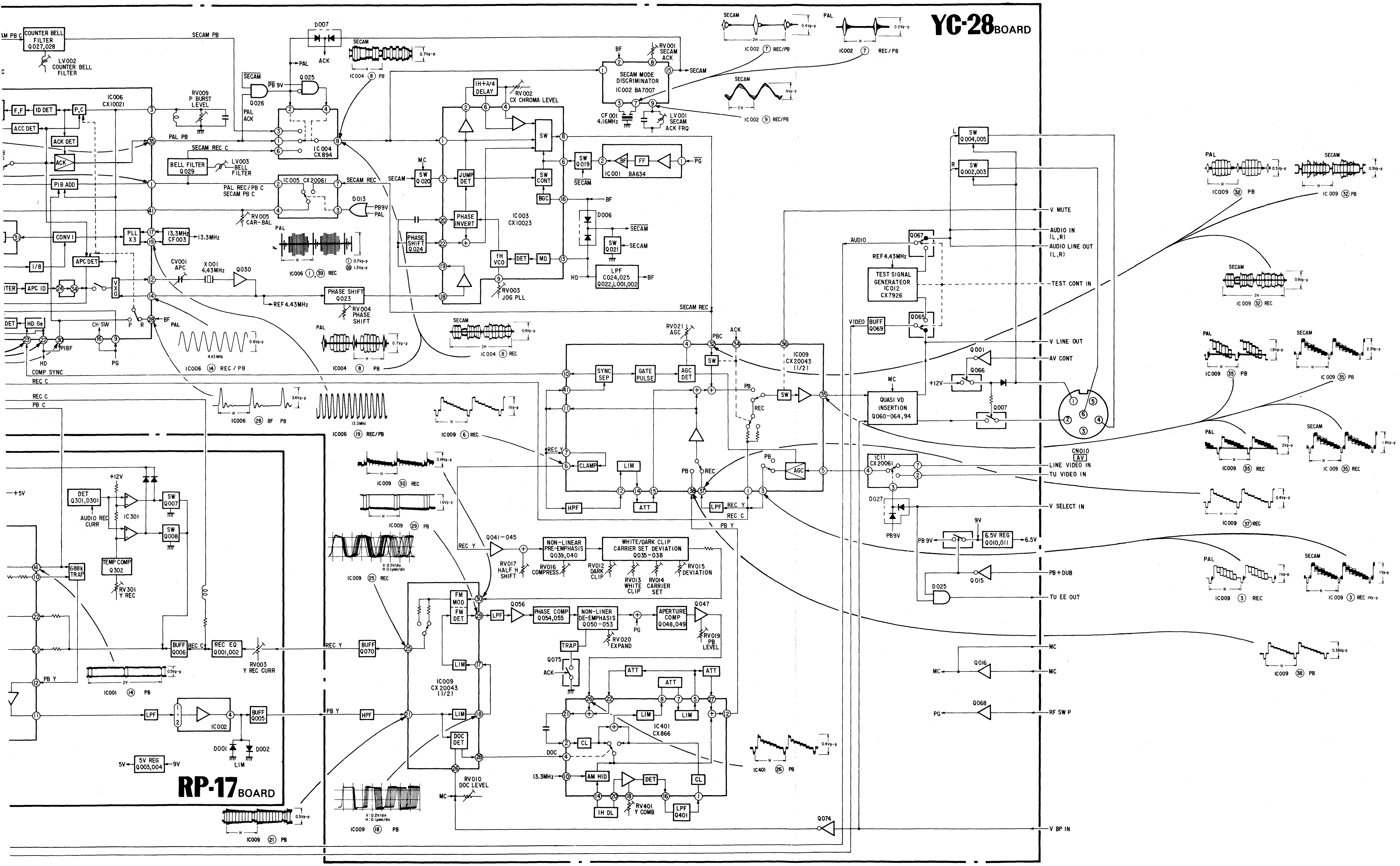
3-2. OVERALL BLOCK DIAGRAM


YC-28 BOARD
VIDEO IN
VIDEO OUT
TUNER
AV
IC009
Y PROCESS
· AGC
· SYNC SEP
· Y/C MIX
IC003
EX CHROMA, JOG CHROMA PROCESS
IC401
Y PROCESS
·DE-EMPHASIS
·DOC
IC002,004
IC005,006
CHROMA PROCESS
· ACC, ACK
·FREQUENCY CONV
· APC, AFC
· CROSS TALK CANCEL
· PAL/SECAM DISCRIMINATION
RP-17 BOARD
IC001
IC002
REC/PB AMP
AGC LIM
REC/PB AMP
VIDEO HEAD A CH, B CH
AUDIO HEAD a cH, b cH
AUDIO IN
AUDIO OUT
AF-3 BOARD
DEM
DYNAMIC EMPHASIS
REC
PB
MOD
AFM
AM
AM-5 BOARD
AUDIO CIRCUIT
BIAS/ERASE OSC
IC501
AUDIO HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
SV-12 BOARD
RL-18 BOARD
LMU
PT-7 BOARD
HP-7 BOARD
HEAD PHONE
TUNER AUDIO
TUNER VIDEO
AERIAL IN
AERIAL OUT
RFU
TU-60 BOARD
TUNER
IC001
VIF
IC002
SIF
IC103
BAND SELECT
IC003
·PROGRAM SELECTOR
·CHANNEL MEMORY
TRACKING CONTROL
TR-14 BOARD
CTL HEAD
SS-28 BOARD
RF SW PULSE
IC301
DRUM SERVO
CAPSTAN SERVO
COMP SYNC
4.43MHz
REC CTL
IC302
PB CTL AMP
IC304
LPF
DRIVE
IC306
LPF
DRIVE
IC305
IC307
CAPSTAN DC BIAS SELECTOR
IC303
FG AMP
DRUM
DRUM MOTOR
M
CAPSTAN
M
S END SENSOR
T END SENSOR
TAPE END SENSOR
RD-7 BOARD
TAKE-UP REEL FG
SUPPLY REEL FG
IC308
REEL FG AMP
RD-6 BOARD
CASSETTE IN
CASSETTE ON
CASSETTE DOWN
THREADING END
UNTHREADING END
REC PROOF
CAMERA PAUSE CONTROL
CAMERA PAUSE
IC601
SYSTEM CONTROL
SERVO SYSTEM CONTROL
VIDEO SYSTEM CONTROL
AUDIO SYSTEM CONTROL
PINCH SOLENOID DRIVER
BRAKE SOLENOID DRIVER
REEL MOTOR CONTROL
THREADING MOTOR DRIVE
M
M
SEGMENT DATA
PROGRAM RESET/UP


RP-17 BOARD
IC001
IC002
REC/PB AMP
AGC LIM
REC/PB AMP
VIDEO HEAD A CH, B CH
AUDIO HEAD a CH, b CH
SS-28 BOARD
RF SW PULSE
IC301
DRUM SERVO
CAPSTAN SERVO
COMP SYNC
4.43MHz
REC CTL
IC302
PB CTL AMP
CTL HEAD
IC304
LPF
DRIVE
IC306
LPF
DRIVE
IC305
IC307
CAPSTAN DC BIAS SELECTOR
IC303
FG AMP
DRUM
DRUM MOTOR
PG COIL A,B,S
M
CAPSTAN MOTOR
M
FG
TRACKING CONTROL
TR-14 BOARD
.RD
AM-5 BOARD
AUDIO CIRCUIT
BIAS/ERASE OSC
IC501
AUDIO HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
S END SENSOR
T END SENSOR
TAPE END SENSOR
RD-7 BOARD
TAKE-UP REEL FG
SUPPLY REEL FG
IC308
REEL FG AMP
IC601
SYSTEM CONTROL
SERVO SYSTEM CONTROL
VIDEO SYSTEM CONTROL
AUDIO SYSTEM CONTROL
PINCH SOLENOID DRIVER
PINCH SOLENOID
BRAKE SOLENOID DRIVER
BRAKE SOLENOID
REEL MOTOR CONTROL
M
REEL MOTOR
THREADING MOTOR DRIVE
M
THREADING MOTOR
SV-12 BOARD
RD-6 BOARD
CASSETTE IN
CASSETTE ON
CASSETTE DOWN
THREADING END
UNTHREADING END
REC PROOF
RL-18 BOARD
LMU
PT-7 BOARD
HP-7 BOARD
HEAD PHONE
CAMERA PAUSE CONTROL
CAMERA PAUSE
2
SEGMENT DATA
PROGRAM RESET/UP
FU-22 BOARD
FUNCTION KEY
FUNCTION INDICATOR
POWER
REMOTE CONTROL RECIEVER
IC001
TIMER
· TIMER
· REMOTE CONTROL
· COUNTER
TIMER SET KEY
FLUORESCENT DISPLAY
TM-54,55 BOARD
POWER ON
POWER BLOCK
IC1,621
POWER SUPPLY
SW 12V
SW 9V
SW 5V
AC IN

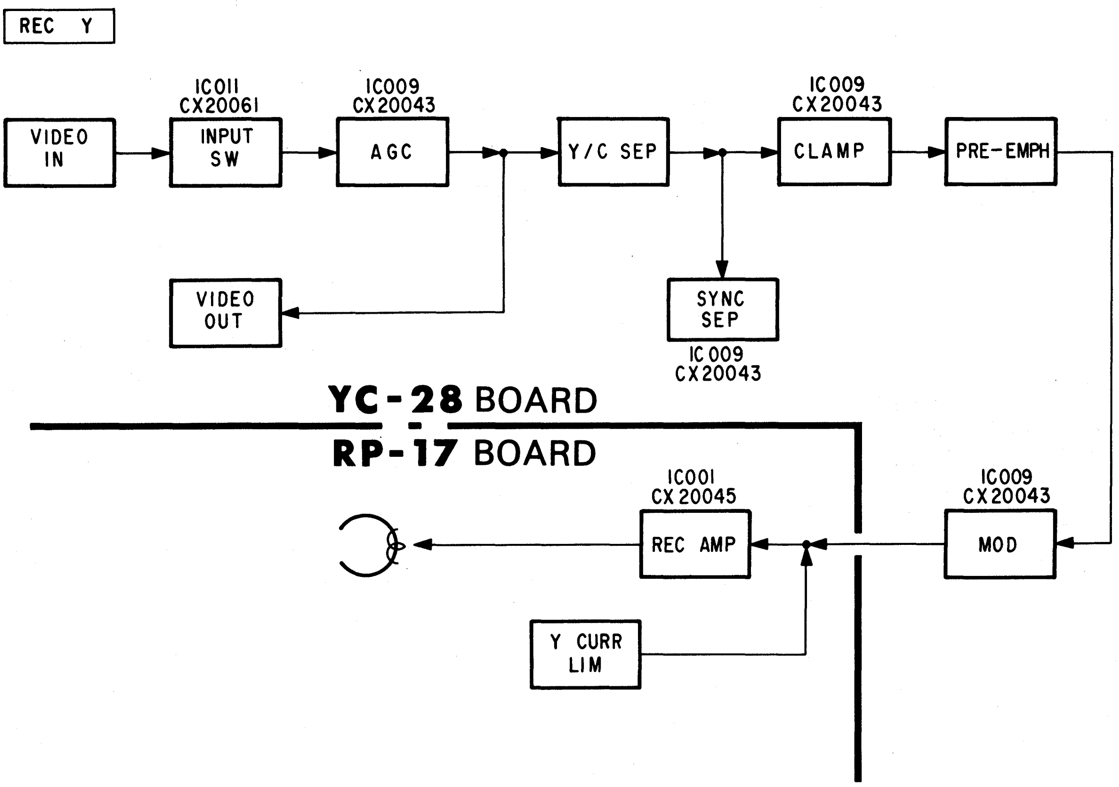
3-3. VIDEO SYSTEM BLOCK DIAGRAM

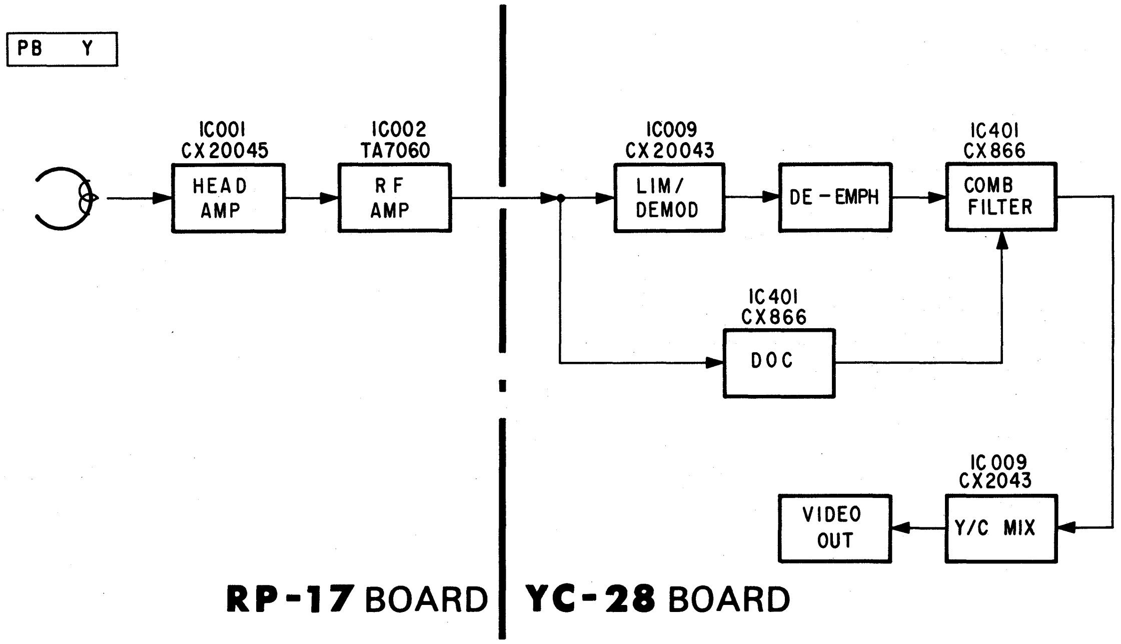

Q502
2H DELAY DL501
Q502 504
4.43MHz BPF BPF 001
SECAM PB C
COUNTER BELL FILTER Q027,028
LV002 COUNTER BELL FILTER
SECAM PB
RV501 C COMB
PAL SECAM Q501
MC
Q033 SW 034
CHROMA REVERSE (B-ID)
F,F
ID DET
P,C
IC006 CX10021
CH HOLD
ACC DET
ACK DET
ACK
PIB ADD
ACC
LPF L007,C073,074
BPF L008,C076
Q071
CONV 2
LPF
Q032 REC C
RV008 C REC CURR
RV006 AFC OFFSET
Q031
PG
RV007 AFC
INV
5.12MHz
CONV I
1/2
1/8
APC DET
VCO
COUNTER
APC ID
VXO
PLL X3
13.3MHz CF003
CV001 APC
X001 4.43MHz
Q030
PHASE SHIFT Q023
RV004 PHASE SHIFT
REF 4.43MHz
AFC DET
HD Ga
CH·SW
HD
COMP SYNC
REC C
PB C
RV009 P BURST LEVEL
PAL PB
SECAM REC C
BELL FILTER Q029
LV003 BELL FILTER
IC005 CX20061
PAL REC/PB C
SECAM PB C
SECAM REC
RV005 CAR-BAL
D013
PB 9V
D007
ACK
Q025
Q026
IC004 CX894
1H+1/4 DELAY
RV002 CX CHROMA LEVEL
SW
JUMP DET
SW CONT
BGC
PHASE INVERT
PHASE SHIFT Q024
IC003 CX10023
fH VCO
DET
MD
RV003 JOG PLL
SW Q020
SW Q019
IC001 BA634
BF
FF
D006
SW Q021
LPF C024,025 Q022,L001,002
SECAM MODE DISCRIMINATOR IC002 BA7007
CF001 4.16MHz
RV001 SECAM ACK
LV001 SECAM ACK FRQ
SECAM REC
RV021 AGC
PBC
SYNC SEP
GATE PULSE
AGC DET
IC009 CX20043 (1/2)
CLAMP
LIM
HPF
ATT
LPF
AGC
Q041-045
NON-LINEAR PRE-EMPHASIS Q039,040
WHITE/DARK CLIP CARRIER SET DEVIATION Q035-038
RV017 HALF H SHIFT
RV016 COMPRESS
RV012 DARK CLIP
RV013 WHITE CLIP
RV014 CARRIER SET
RV015 DEVIATION
FM MOD
FM DET
Q056
PHASE COMP Q054,055
NON-LINER DE-EMPHASIS Q050-053
RV020 EXPAND
APERTURE COMP Q048,049
Q047
RV019 PB LEVEL
TRAP
Q075
BUFF Q070
DOC DET
RV010 DOC LEVEL
IC401 CX866
AM HID
CL
1H DL
RV401 Y COMB
LPF Q401
13.3MHz
Q074
AUDIO
REF 4.43M
TEST SIG GENERAT IC012 CX792
VIDEO BUFF Q069
QUASI V INSERTI Q060-064
IC11 CX20061
SERVO ROCK
RV004 CH-BAL
RV001 A-CH
RV002 A-CH
+5V
PB AMP
EQ AMP
REC AMP
EQ
REC EQ
IC001 CX20045
VIDEO HEAD A-CH
VIDEO HEAD B-CH
+12V
DET Q301,D301
AUDIO REC CURR
IC301
SW Q007
SW Q008
TEMP COMP Q302
RV301 Y REC
688k TRAP
BUFF Q006
REC EQ Q001,002
RV003 Y REC CURR
PB Y
REC Y
LPF
IC002
BUFF Q005
D001
D002
5V REG Q003,004
RF MOD
AGC AMP Q201,202
VIDEO
RP-17 BOARD
IC006 ㊲ PB
IC006 ㉟ PB
IC006 ㉟ REC
IC006 ① PB
IC006 ① REC
IC006 ⑦ PB
IC006 ㊴ REC
IC006 ㊴ PB
IC006 ㉝ REC/PB
IC006 ⑤ REC
IC006 ㉚ REC/PB
IC006 ⑭ REC/PB
IC006 ㉘ BF PB
IC006 ⑲ REC/PB
IC004 ⑧ PB
IC004 ⑧ REC
IC002 ⑦ REC/PB
IC002 ⑨ REC/PB
IC001 ⑯,⑲ PB
IC001 ④,㉕ REC
IC001 ⑭ PB
IC009 ⑥ REC
IC009 ㉚ REC
IC009 ㉙ PB
IC009 ㉕ REC
IC009 ㉑ PB
IC009 ⑧ PB
IC401 ㉖ PB
REC/PB



YC-28 BOARD
RP-17 BOARD
COUNTER BELL FILTER Q027,028
LV002 COUNTER BELL FILTER
SECAM PB
D007
ACK
PAL
SECAM
PB 9V
Q025
Q026
PAL ACK
RV009 P BURST LEVEL
IC006 CX10021
F,F
ID DET
P,C
ACC DET
ACK DET
ACK
P/B ADD
PAL PB
SECAM REC C
BELL FILTER Q029
LV003 BELL FILTER
IC004 CX894
IC005 CX20061
PAL REC/PB C
SECAM PB C
SECAM REC
D013
PB9V
RV005 CAR-BAL
CONV I
PLL X3
13.3MHz CF003
13.3MHz
APC DET
1/8
APC ID
VXO
CV001 APC
X001 4.43MHz
Q030
REF 4.43MHz
PHASE SHIFT Q023
RV004 PHASE SHIFT
CH-SW
HD Ge
PIBF
HD
PG
COMP SYNC
REC C
PB C
1H+λ/4 DELAY
RV002 CX CHROMA LEVEL
SW
JUMP DET
SW CONT
BGC
PHASE INVERT
PHASE SHIFT Q024
fH VCO
DET
MD
IC003 CX10023
RV003 JOG PLL
SW Q020
MC
SW Q019
IC001 BA634
BF
FF
D006
SW Q021
LPF C024,025 Q022,L001,002
SECAM MODE DISCRIMINATOR IC002 BA7007
RV001 SECAM ACK
CF001 4.16MHz
LV001 SECAM ACK FRQ
SECAM REC
RV021 AGC
PBC
SYNC SEP
GATE PULSE
AGC DET
IC009 CX20043 (1/2)
CLAMP
LIM
HPF
ATT
AGC
LPF
REC Y
PB Y
Q041-045
NON-LINEAR PRE-EMPHASIS Q039,040
WHITE/DARK CLIP CARRIER SET DEVIATION Q035-038
RV017 HALF H SHIFT
RV016 COMPRESS
RV012 DARK CLIP
RV013 WHITE CLIP
RV014 CARRIER SET
RV015 DEVIATION
FM MOD
FM DET
Q056
PHASE COMP Q054,055
NON-LINER DE-EMPHASIS Q050-053
APERTURE COMP Q048,049
Q047
RV019 PB LEVEL
RV020 EXPAND
TRAP
Q075
DOC DET
RV010 DOC LEVEL
IC401 CX866
CL
AM HID
1H DL
RV401 Y COMB
LPF Q401
13.3MHz
DOC
Q074
DET Q301,D301
AUDIO REC CURR
IC301
SW Q007
SW Q008
+12V
+5V
TEMP COMP Q302
RV301 Y REC
688k TRAP
BUFF Q006
REC EQ Q001,002
RV003 Y REC CURR
BUFF Q070
BUFF Q005
IC002
D001
D002
LIM
5V REG Q003,004
5V
9V
SW Q004,005
SW Q002,003
Q067
AUDIO
REF 4.43MHz
TEST SIGNAL GENERATOR IC012 CX7926
VIDEO
BUFF Q069
Q065
Q001
Q066
Q007
QUASI VD INSERTION Q060-064,94
IC11 CX20061
D027
PB9V
6.5V REG Q010,011
6.5V
Q015
D025
Q016
Q068
V MUTE
AUDIO IN (L,R)
AUDIO LINE OUT (L,R)
TEST CONT IN
V LINE OUT
AV CONT
CN010 AV
LINE VIDEO IN
TU VIDEO IN
V SELECT IN
PB+DUB
TU EE OUT
MC
RF SW P
V BP IN
IC002 ⑦ REC/PB
IC002 ⑨ REC/PB
IC004 ⑧ PB
IC004 ⑧ REC
IC006 ①,㊴ REC
IC006 ⑭ REC/PB
IC006 ㉘ BF PB
IC006 ⑲ REC/PB
IC009 ⑥ REC
IC009 ㉚ REC
IC009 ㉙ PB
IC009 ㉕ REC
IC009 ⑱ PB
IC009 ㉑ PB
IC001 ⑭ PB
IC401 ㉖ PB
IC009 ㉜ PB
IC009 ㉜ REC
IC009 ㉟ PB
IC009 ㉟ REC
IC009 ㊲ REC
IC009 ③ REC
IC009 ㊳ PB

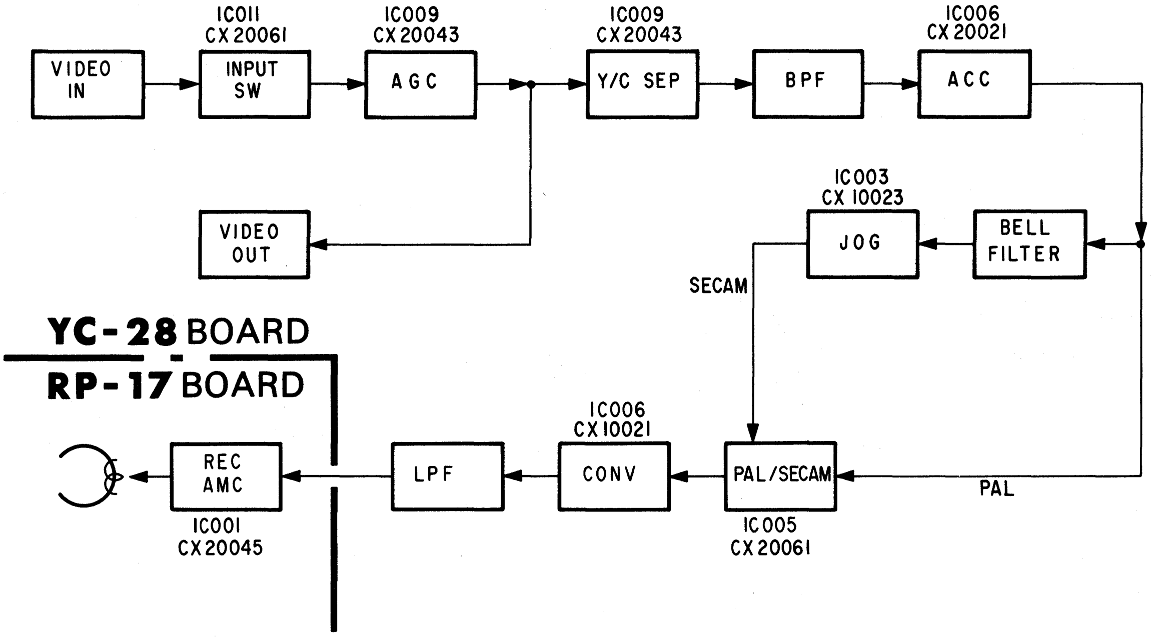
3-4. VIDEO Y BLOCK DIAGRAM


REC Y
VIDEO IN
IC011 CX20061 INPUT SW
IC009 CX20043 AGC
VIDEO OUT
Y/C SEP
IC009 CX20043 CLAMP
PRE-EMPH
SYNC SEP IC009 CX20043
YC-28 BOARD
RP-17 BOARD
IC001 CX20045 REC AMP
IC009 CX20043 MOD
Y CURR LIM

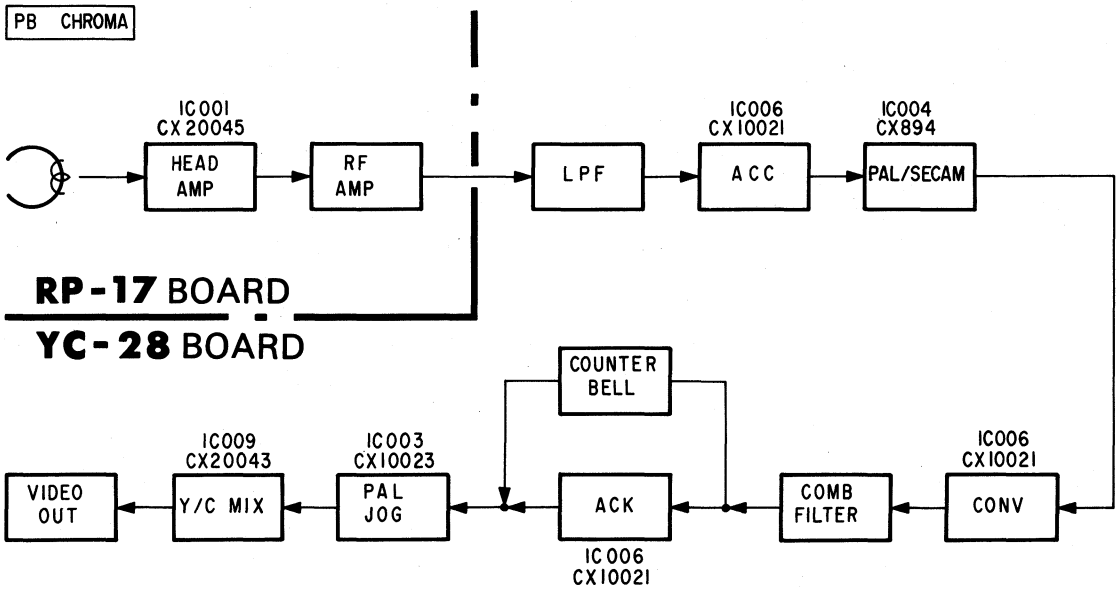

PB Y
IC001 CX20045 HEAD AMP
IC002 TA7060 RF AMP
IC009 CX20043 LIM/ DEMOD
DE-EMPH
IC401 CX866 COMB FILTER
IC401 CX866 DOC
IC009 CX2043 Y/C MIX
VIDEO OUT
RP-17 BOARD
YC-28 BOARD

3-5. VIDEO CHROMA BLOCK DIAGRAM

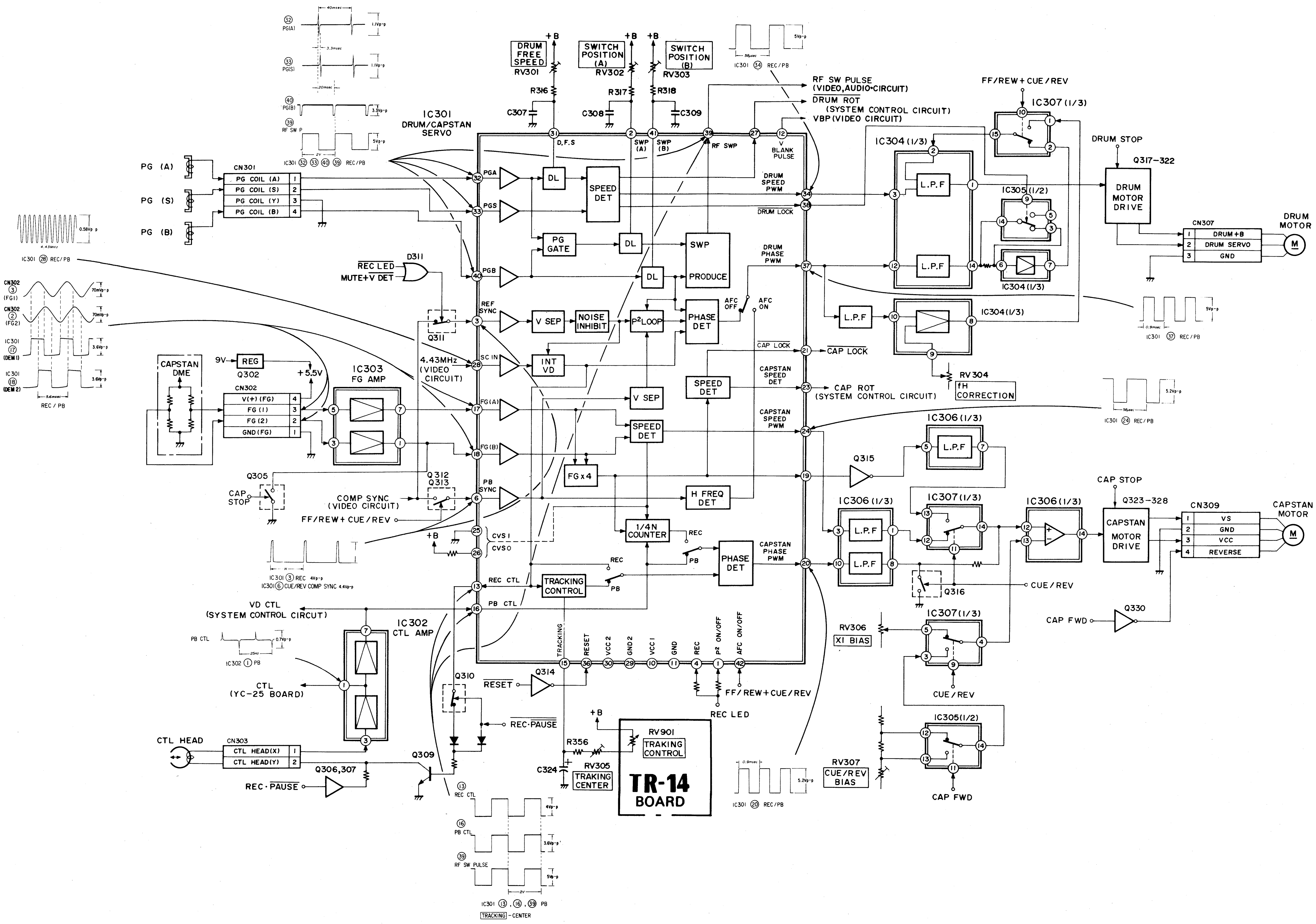
REC CHROMA


VIDEO IN
IC011 CX20061
INPUT SW
IC009 CX20043
AGC
IC009 CX20043
Y/C SEP
BPF
IC006 CX20021
ACC
VIDEO OUT
IC003 CX10023
JOG
BELL FILTER
SECAM
YC-28 BOARD
RP-17 BOARD
IC006 CX10021
REC AMC
IC001 CX20045
LPF
CONV
PAL/SECAM
IC005 CX20061
PAL

PB CHROMA

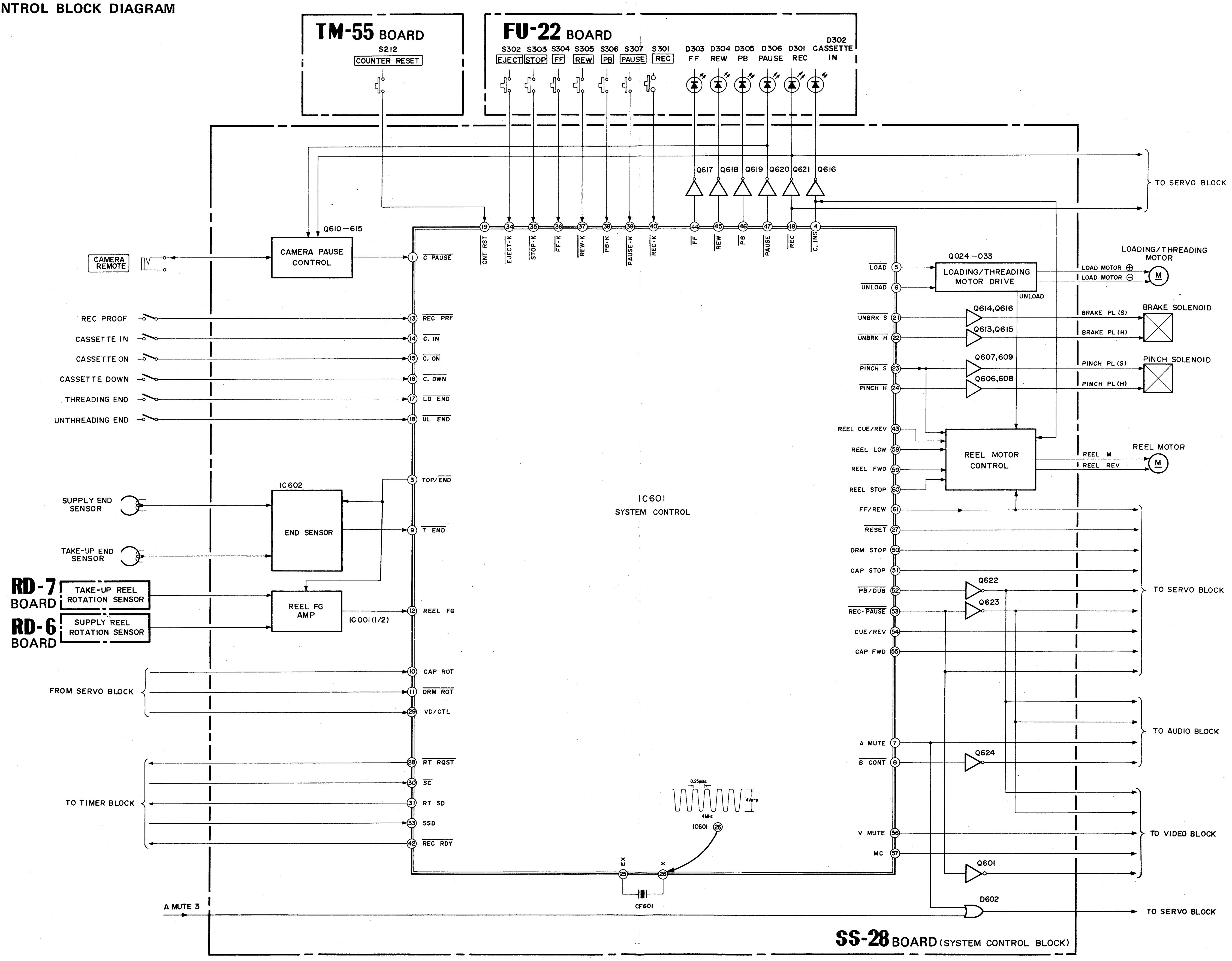

IC001 CX20045
HEAD AMP
RF AMP
IC006 CX10021
IC004 CX894
LPF
ACC
PAL/SECAM
RP-17 BOARD
YC-28 BOARD
COUNTER BELL
IC009 CX20043
IC003 CX10023
IC006 CX10021
VIDEO OUT
Y/C MIX
PAL JOG
ACK
COMB FILTER
CONV
IC006 CX10021

3-6. SERVO SYSTEM BLOCK DIAGRAM



IC301 DRUM/CAPSTAN SERVO
PG (A)
PG (S)
PG (B)
CN301
PG COIL (A)
PG COIL (S)
PG COIL (Y)
PG COIL (B)
DRUM FREE SPEED RV301
SWITCH POSITION (A) RV302
SWITCH POSITION (B) RV303
+B
R316
R317
R318
C307
C308
C309
D.F.S
SWP (A)
SWP (B)
RF SWP
V BLANK PULSE
RF SW PULSE (VIDEO,AUDIO CIRCUIT)
DRUM ROT (SYSTEM CONTROL CIRCUIT)
VBP (VIDEO CIRCUIT)
PGA
PGS
PGB
DL
SPEED DET
PG GATE
SWP PRODUCE
DRUM SPEED PWM
DRUM LOCK
DRUM PHASE PWM
AFC OFF
AFC ON
REF SYNC
V SEP
NOISE INHIBIT
P²LOOP
PHASE DET
REC LED
MUTE+V DET
D311
Q311
SC IN
4.43MHz (VIDEO CIRCUIT)
INT VD
CAP LOCK
CAPSTAN SPEED DET
CAP ROT (SYSTEM CONTROL CIRCUIT)
CAPSTAN SPEED PWM
CAPSTAN DME
9V
REG
Q302
+5.5V
IC303 FG AMP
CN302
V(+) (FG)
FG (1)
FG (2)
GND (FG)
FG(A)
FG(B)
FG x 4
H FREQ DET
PB SYNC
Q305
CAP STOP
COMP SYNC (VIDEO CIRCUIT)
FF/REW+CUE/REV
Q312 Q313
CVS I
CVS O
1/4N COUNTER
REC
PB
CAPSTAN PHASE PWM
REC CTL
PB CTL
TRACKING CONTROL
VD CTL (SYSTEM CONTROL CIRCUIT)
IC302 CTL AMP
CTL (YC-25 BOARD)
CTL HEAD
CN303
CTL HEAD(X)
CTL HEAD(Y)
Q306,307
REC·PAUSE
Q309
Q310
RESET
Q314
TRACKING
RESET
VCC 2
GND 2
VCC 1
GND
REC
P² ON/OFF
AFC ON/OFF
FF/REW+CUE/REV
REC LED
+B
R356
C324
RV305 TRAKING CENTER
RV901 TRAKING CONTROL
TR-14 BOARD
FF/REW+CUE/REV
IC307 (1/3)
IC304 (1/3)
L.P.F
IC305 (1/2)
DRUM STOP
Q317-322
DRUM MOTOR DRIVE
CN307
DRUM+B
DRUM SERVO
GND
DRUM MOTOR
M
RV304 fH CORRECTION
IC306 (1/3)
Q315
CAP STOP
Q323-328
CAPSTAN MOTOR DRIVE
CN309
VS
GND
VCC
REVERSE
CAPSTAN MOTOR
Q316
CUE/REV
CAP FWD
Q330
RV306 XI BIAS
RV307 CUE/REV BIAS
IC301 ㉘ REC/PB
IC301 ㉜ ㉝ ㊵ ㊴ REC/PB
IC301 ㉞ REC/PB
IC301 ㊲ REC/PB
IC301 ㉔ REC/PB
IC301 ⑳ REC/PB
IC301 ③ REC
IC301 ⑥ CUE/REV COMP SYNC
IC302 ① PB
IC301 ⑬, ⑯, ㊴ PB
TRACKING - CENTER
REC CTL
PB CTL
RF SW PULSE
REC / PB

3-7. SYSTEM CONTROL BLOCK DIAGRAM


TM-55 BOARD
S212
COUNTER RESET
FU-22 BOARD
S302 EJECT
S303 STOP
S304 FF
S305 REW
S306 PB
S307 PAUSE
S301 REC
D303 FF
D304 REW
D305 PB
D306 PAUSE
D301 REC
D302 CASSETTE IN
Q617
Q618
Q619
Q620
Q621
Q616
TO SERVO BLOCK
Q610−615
CAMERA PAUSE CONTROL
CAMERA REMOTE
REC PROOF
CASSETTE IN
CASSETTE ON
CASSETTE DOWN
THREADING END
UNTHREADING END
IC602
END SENSOR
SUPPLY END SENSOR
TAKE-UP END SENSOR
RD-7 BOARD
TAKE-UP REEL ROTATION SENSOR
RD-6 BOARD
SUPPLY REEL ROTATION SENSOR
REEL FG AMP
IC001(1/2)
FROM SERVO BLOCK
TO TIMER BLOCK
A MUTE 3
C PAUSE
REC PRF
C. IN
C. ON
C. DWN
LD END
UL END
TOP/END
T END
REEL FG
CAP ROT
DRM ROT
VD/CTL
RT RQST
SC
RT SD
SSD
REC RDY
CNT RST
EJECT-K
STOP-K
FF-K
REW-K
PB-K
PAUSE-K
REC-K
FF
REW
PB
PAUSE
REC
C. INS
IC601
SYSTEM CONTROL
0.25μsec
4Vp-p
4MHz
IC601 ㉖
EX
X
CF601
LOAD
UNLOAD
UNBRK S
UNBRK H
PINCH S
PINCH H
REEL CUE/REV
REEL LOW
REEL FWD
REEL STOP
FF/REW
RESET
DRM STOP
CAP STOP
PB/DUB
REC·PAUSE
CUE/REV
CAP FWD
A MUTE
B CONT
V MUTE
MC
Q024−033
LOADING/THREADING MOTOR DRIVE
UNLOAD
LOADING/THREADING MOTOR
LOAD MOTOR ⊕
LOAD MOTOR ⊖
M
Q614,Q616
Q613,Q615
BRAKE PL(S)
BRAKE PL(H)
BRAKE SOLENOID
Q607,609
Q606,608
PINCH PL(S)
PINCH PL(H)
PINCH SOLENOID
REEL MOTOR CONTROL
REEL MOTOR
REEL M
REEL REV
Q622
Q623
TO SERVO BLOCK
TO AUDIO BLOCK
Q624
TO VIDEO BLOCK
Q601
D602
TO SERVO BLOCK
SS-28 BOARD (SYSTEM CONTROL BLOCK)

3-8. SYSTEM CONTROL CIRCUIT AND MECHANISM BLOCK INTERFACE

MODE			EJECTED	LOADING	THREADING	STOP	UN-THREADING	UN-LOADING	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
SIGNAL	I/O	Pin No.											CUE	REV				CUE	REV
$\overline{\text{REC PROOF}}$	I	IC601 13pin	H	H	H/L	H/L	H/L	H	H/L	H/L	H/L	H/L	H/L	H/L	L	L	L	H/L	H/L
$\overline{\text{C·IN}}$	I	IC601 14pin	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{C·ON}}$	I	IC601 15pin	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{C·DWN}}$	I	IC601 16pin	H	H	L	L	L	H	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{LD END}}$	I	IC601 17pin	H	H	H	L	H	H	L	L	L	L	L	L	L	L	L	L	L
$\overline{\text{UL END}}$	I	IC601 18pin	L	L	H	H	H	L	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{UNBRK S}}$	O	IC601 21pin	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{UNBRK H}}$	O	IC601 22pin	H	H	L	H	L	H	L	L	L	H	L	L	L	H	L	L	L
$\overline{\text{PINCH S}}$	O	IC601 23pin	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{PINCH H}}$	O	IC601 24pin	H	L	H	H	H	L	H	H	L	H	L	L	L	H	L	H	H
$\overline{\text{LOAD}}$	O	IC601 5pin	H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{UNLOAD}}$	O	IC601 6pin	H	H	H	H	L	L	H	H	H	H	H	H	H	H	H	H	H

3-9. SYSTEM CONTROL CIRCUIT AND REMOTE CONTROL/TIMER CIRCUIT INTERFACE

MODE			STOP	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
SIGNAL	I/O	Pin No.						CUE	REV				CUE	REV
$\overline{\text{RT RQST}}$	I	IC601 28pin												
RTSD	I	IC601 31pin												
$\overline{\text{COUNTER RESET}}$	I	IC601 19pin												
SSD	O	IC601 33pin												
$\overline{\text{SC}}$	O	IC601 30pin												
$\overline{\text{REC READY}}$	O	IC601 42pin	H/L	H	H	H	H	H	H	H	H	L	H	H

3-10. SYSTEM CONTROL CIRCUIT AND

MODE			ST
SIGNAL	I/O	Pin No.	
$\overline{\text{EJECT·K}}$	I	IC601 34pin	
$\overline{\text{STOP·K}}$	I	IC601 35pin	
$\overline{\text{FF·K}}$	I	IC601 36pin	
$\overline{\text{REW·K}}$	I	IC601 37pin	
$\overline{\text{PB·K}}$	I	IC601 38pin	
$\overline{\text{PAUSE·K}}$	I	IC601 39pin	
$\overline{\text{REC·K}}$	I	IC601 40pin	
$\overline{\text{FF}}$	O	IC601 44pin	
$\overline{\text{REW}}$	O	IC601 45pin	
$\overline{\text{PB}}$	O	IC601 46pin	
$\overline{\text{PAUSE}}$	O	IC601 47pin	
$\overline{\text{REC}}$	O	IC601 48pin	
$\overline{\text{C·INSIDE}}$	O	IC601 4pin	

3-11. SYSTEM CONTROL CIRCUIT AND

MODE			ST
SIGNAL	I/O	Pin No.	
TEND*[1]	I	IC601 9pin	H
C·PAUSE*[2]	I	IC601 1pin	H
TOP/END	O	IC601 3pin	L

*1 "L" at tape end.

*2 Camera pause signal.

LOADING	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
					CUE	REV				CUE	REV
	H/L	H/L	H/L	H/L	H/L	H/L	L	L	L	H/L	H/L
	L	L	L	L	L	L	L	L	L	L	L
	L	L	L	L	L	L	L	L	L	L	L
	L	L	L	L	L	L	L	L	L	L	L
	L	L	L	L	L	L	L	L	L	L	L
	H	H	H	H	H	H	H	H	H	H	H
	H	H	H	H	H	H	H	H	H	H	H
	L	L	L	H	L	L	L	H	L	L	L
	H	H	H	H	H	H	H	H	H	H	H
	H	H	L	H	L	L	L	H	L	H	H
	H	H	H	H	H	H	H	H	H	H	H
	H	H	H	H	H	H	H	H	H	H	H

TERFACE

ICTURE EARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
E	REV				CUE	REV
	H	H	H	L	H	H

3-10. SYSTEM CONTROL CIRCUIT AND FUNCTION BLOCK INTERFACE

SIGNAL \ MODE	I/O	Pin No.	STOP	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
$\overline{\text{EJECT}\cdot\text{K}}$	I	IC601 34pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{STOP}\cdot\text{K}}$	I	IC601 35pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{FF}\cdot\text{K}}$	I	IC601 36pin	H	H	H	H	H	L	H	H	H	H	L	H
$\overline{\text{REW}\cdot\text{K}}$	I	IC601 37pin	H	H	H	H	H	H	L	H	H	H	H	L
$\overline{\text{PB}\cdot\text{K}}$	I	IC601 38pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{PAUSE}\cdot\text{K}}$	I	IC601 39pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{REC}\cdot\text{K}}$	I	IC601 40pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{FF}}$	O	IC601 44pin	H	L	H	H	H	L	H	H	H	H	L	H
$\overline{\text{REW}}$	O	IC601 45pin	H	H	L	H	H	H	L	H	H	H	H	L
$\overline{\text{PB}}$	O	IC601 46pin	H	H	H	L	L	L	L	H	H	H	L	L
$\overline{\text{PAUSE}}$	O	IC601 47pin	H	H	H	H	L	H	H	H	L	H	H	H
$\overline{\text{REC}}$	O	IC601 48pin	H	H	H	H	H	H	H	L	L	L	H	H
$\overline{\text{C}\cdot\text{INSIDE}}$	O	IC601 4pin	L	L	L	L	L	L	L	L	L	L	L	L

3-11. SYSTEM CONTROL CIRCUIT AND ITS PERIPHERAL CIRCUIT INTERFACE

SIGNAL \ MODE	I/O	Pin No.	STOP	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
TEND*[1]	I	IC601 9pin	H	H	H	H	H	H	H	H	H	H	H	H
C·PAUSE*[2]	I	IC601 1pin	H	H	H	H	H	H	H	H	H	H	H	H
TOP/END	O	IC601 3pin	L	L	H	L	L	L	H	L	L	L	L	H

*1 "L" at tape end.

*2 Camera pause signal.

3-12. SYSTEM CONTROL CIRCUIT AND REEL MOTOR CONTROL CIRCUIT INTERFACE

SIGNAL	I/O	Pin No.	EJECTED	LOADING	THREADING	STOP	UN-THREADING	UN-LOADING	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
													CUE	REV				CUE	REV
REEL FG	I	IC601 12pin																	
REEL LOW	O	IC601 58pin	L	L	H	L	H	L	L	L	H	H	L	L	H	H	H	H	H
REEL FWD	O	IC601 59pin	H	H	H	H	L	H	H	L	H	H	H	L	H	H	H	H	L
REEL STOP	O	IC601 60pin	H	H	L	H	L	H	L	L	L	H	L	L	L	H	L	L	L
FF/REW	O	IC601 61pin	L	L	L	L	L	L	H	H	L	L	L	L	L	L	L	H	H
REEL CUE/REV	O	IC601 43pin	L	L	L	L	L	L	L	L	L	L	H	H	L	L	L	L	L
$\overline{\text{PINCH S}}$	O	IC601 23pin	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H
TOP/$\overline{\text{END}}$	O	IC601 3pin	L	L	L	L	L	L	L	H	L	L	L	H	L	L	L	L	H
$\overline{\text{UNLOAD}}$	O	IC601 6pin	H	H	H	H	L	L	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{C·INSIDE}}$	O	IC601 4pin	H	H	H	L	H	H	L	L	L	L	L	L	L	L	L	L	L

3-13. SYSTEM CONTROL CIRCUIT AND VIDEO CIRCUIT INTERFACE

SIGNAL	I/O	Pin No.	STOP (E-E)	FF	REW	PB	PB·PAUSE	PICTURE SEARCH		REC	REC·PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
V MUTE	O	IC601 56pin	L	L	L	L	L	L	L	L	L	L	L	L
MC	O	IC601 57pin	L	L	L	L	H	H	H	L	L	L	H	H
V REC·$\overline{\text{PAUSE}}$	O	CN601 3pin	L	L	L	L	L	L	L	H*[1]	L	H*[1]	L	L
$\overline{\text{PB}}$ + DUB	O	IC601 52pin	H	H	H	L	L	L	L	H	H	H	L	L

*[1] RECORD mode selector switch: VIDEO

3-14. SYSTEM CONTROL CIRCUIT AND SE

SIGNAL	I/O	Pin No.	STOP
$\overline{\text{DRUM ROT}}$	I	IC601 11pin	H
CAP ROT	I	IC601 10pin	L
VD/CTL	I	IC601 29pin	
DRUM STOP	O	IC601 50pin	H
CAP STOP	O	IC601 51pin	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H
CUE/REV	O	IC601 54pin	L
CAP FWD	O	IC601 55pin	H
$\overline{\text{194 RESET}}$*[1]	O	IC601 27pin	H
$\overline{\text{REC}}$ (REC $\overline{\text{LED}}$)	O	IC601 48pin	H
FF/REW	O	IC601 61pin	L

*[1] Reset signal for CX194.

3-15. SYSTEM CONTROL CIRCUIT AND AU

SIGNAL	I/O	Pin No.	STOP (E-E)
A MUTE 2	O	IC601 7pin	L
B CONT	O	IC601 8pin	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H
$\overline{\text{PB}}$ + DUB	O	IC601 52pin	H

REW	PB	PB· PAUSE	PICTURE SEARCH		REC	REC· PAUSE	TIMER REC	FR SEARCH	
			CUE	REV				CUE	REV
L	H	H	L	L	H	H	H	H	H
L	H	H	H	L	H	H	H	H	L
L	L	H	L	L	L	H	L	L	L
H	L	L	L	L	L	L	L	H	H
L	L	L	H	H	L	L	L	L	L
H	H	H	H	H	H	H	H	H	H
H	L	L	L	H	L	L	L	L	H
H	H	H	H	H	H	H	H	H	H
L	L	L	L	L	L	L	L	L	L

REC	REC· PAUSE	TIMER REC	FR SEARCH	
			CUE	REV
L	L	L	L	L
L	L	L	H	H
H*[1]	L	H*[1]	L	L
H	H	H	L	L

3-14. SYSTEM CONTROL CIRCUIT AND SERVO CIRCUIT INTERFACE

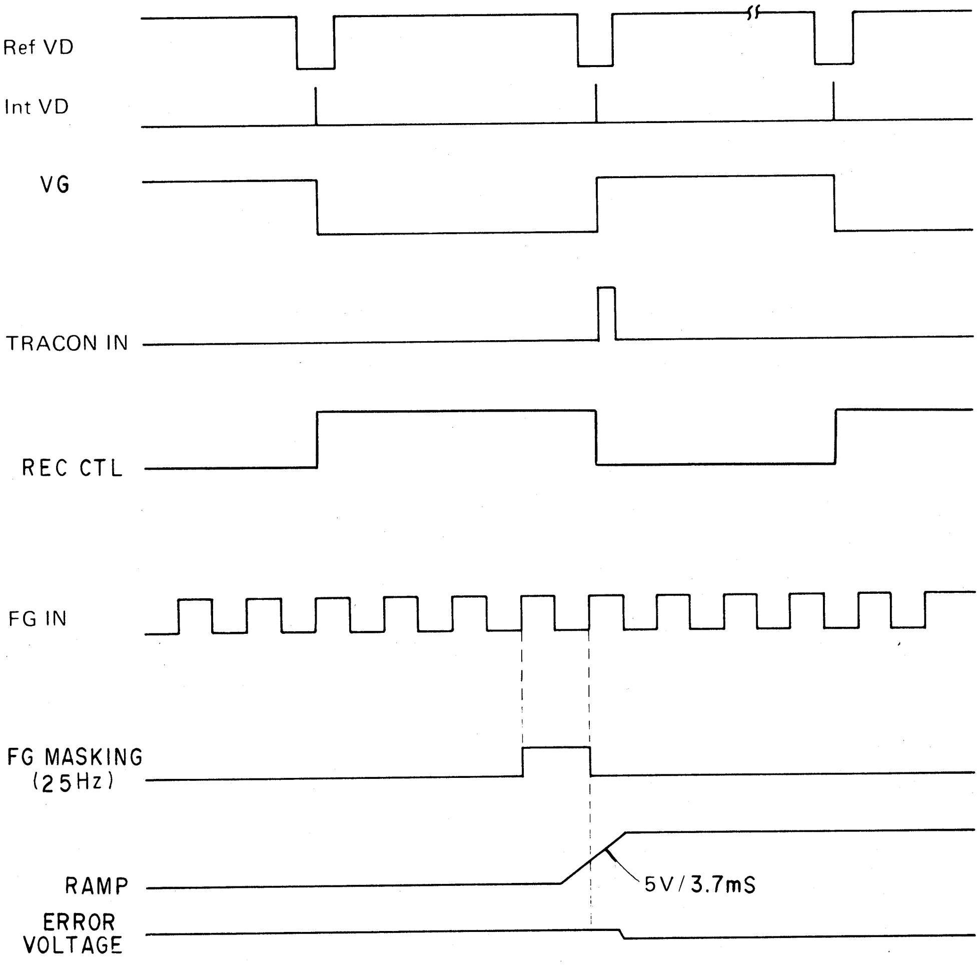
MODE SIGNAL	I/O	Pin No.	STOP	FF	REW	PB	PB· PAUSE	PICTURE SEARCH		REC	REC· PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
$\overline{\text{DRUM ROT}}$	I	IC601 11pin	H	L	L	L	L	L	L	L	L	L	L	L
CAP ROT	I	IC601 10pin	L	L	L	H	H	H	H	H	H	H	L	L
VD/CTL	I	IC601 29pin		CTL	CTL	CTL		CTL	CTL	VD		VD	CTL	CTL
DRUM STOP	O	IC601 50pin	H	L	L	L	L	L	L	L	L	L	L	L
CAP STOP	O	IC601 51pin	H	H	H	L	L	L	L	L	L	L	H	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H	H	H	H	H	H	H	L	H	L	H	H
CUE/REV	O	IC601 54pin	L	L	L	L	L	H	H	L	L	L	L	L
CAP FWD	O	IC601 55pin	H	H	H	H	H	H	L	H	H	H	H	H
$\overline{\text{194 RESET}}$*[1]	O	IC601 27pin	H	H	H	H	H	H	H	H	H	H	H	H
$\overline{\text{REC}}$ ($\overline{\text{REC LED}}$)	O	IC601 48pin	H	H	H	H	H	H	H	L	L	L	H	H
FF/REW	O	IC601 61pin	L	H	H	L	L	L	L	L	L	L	H	H

*1 Reset signal for CX194.

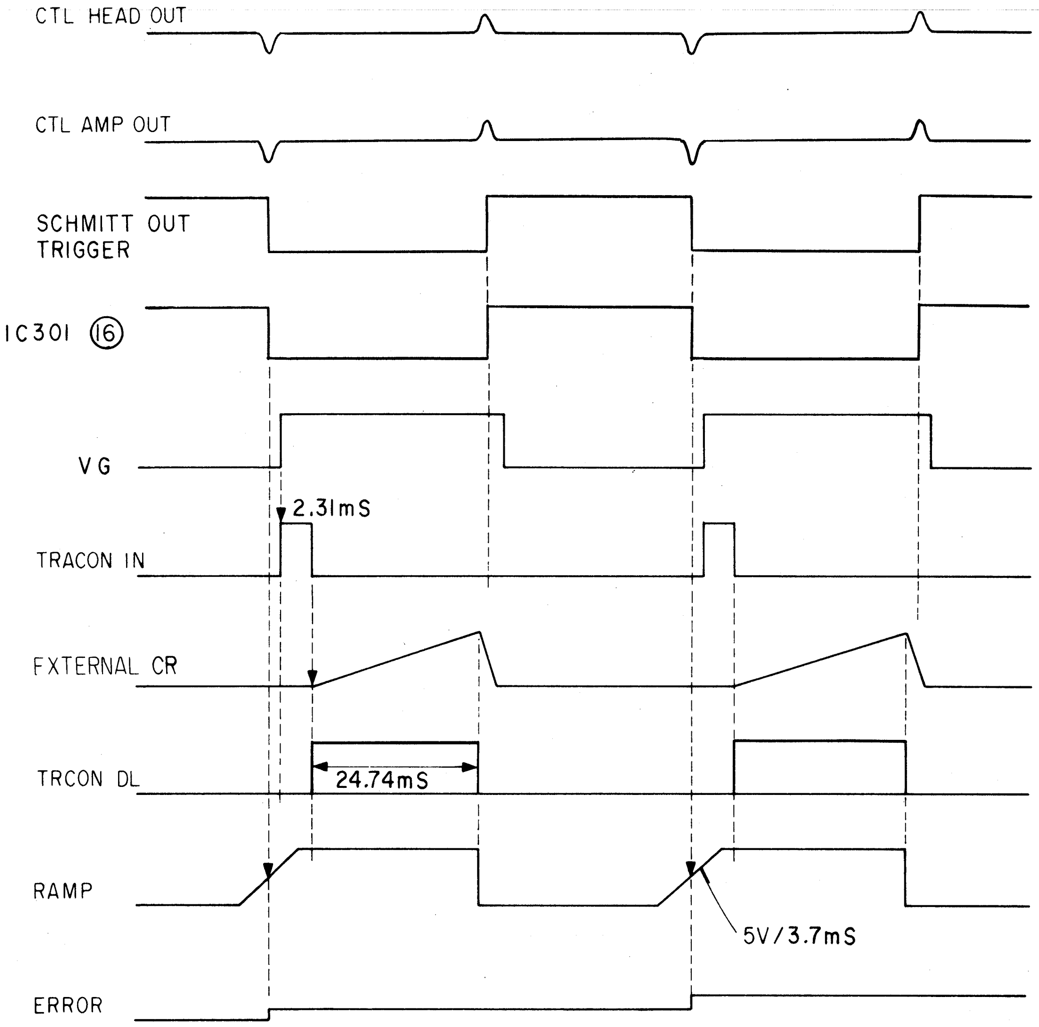
3-15. SYSTEM CONTROL CIRCUIT AND AUDIO CIRCUIT INTERFACE

MODE SIGNAL	I/O	Pin No.	STOP (E-E)	FF	REW	PB	PB· PAUSE	PICTURE SEARCH		REC	REC· PAUSE	TIMER REC	FR SEARCH	
								CUE	REV				CUE	REV
A MUTE 2	O	IC601 7pin	L	L	L	L	H	H	H	L	L	L	H	H
B CONT	O	IC601 8pin	H	H	H	H	H	H	H	L	H	L	H	H
$\overline{\text{REC·PAUSE}}$	O	IC601 53pin	H	H	H	H	H	H	H	L	H	L	H	H
$\overline{\text{PB + DUB}}$	O	IC601 52pin	H	H	H	L	L	L	L	H	H	H	L	L

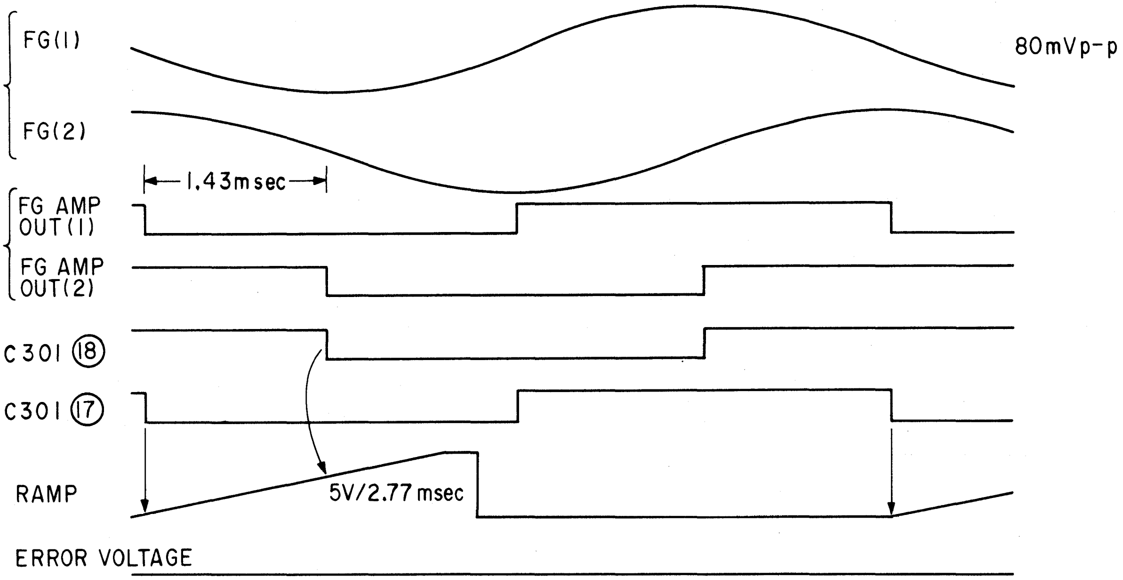
3-16. CAPSTAN PHASE SYSTEM TIMING CHART (REC)


Ref VD
Int VD
VG
TRACON IN
REC CTL
FG IN
FG MASKING (25Hz)
RAMP
5V/3.7mS
ERROR VOLTAGE

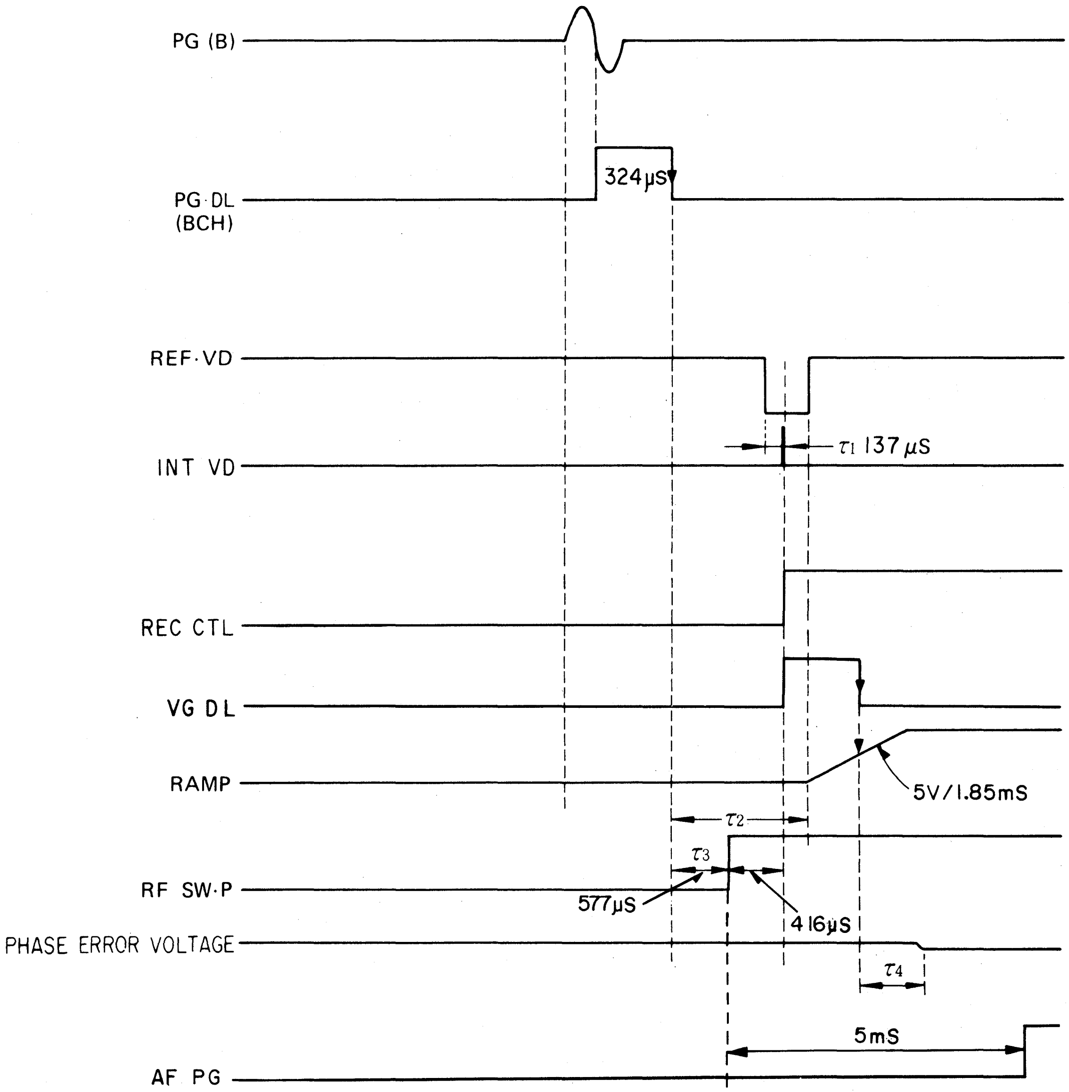
3-17. CAPSTAN PHASE SYSTEM TIMING CHART (PB)


CTL HEAD OUT
CTL AMP OUT
SCHMITT OUT
TRIGGER
IC301 ⑯
VG
2.31mS
TRACON IN
FXTERNAL CR
TRCON DL
24.74mS
RAMP
5V/3.7mS
ERROR

3-18. CAPSTAN SPEED SYSTEM TIMING CHART

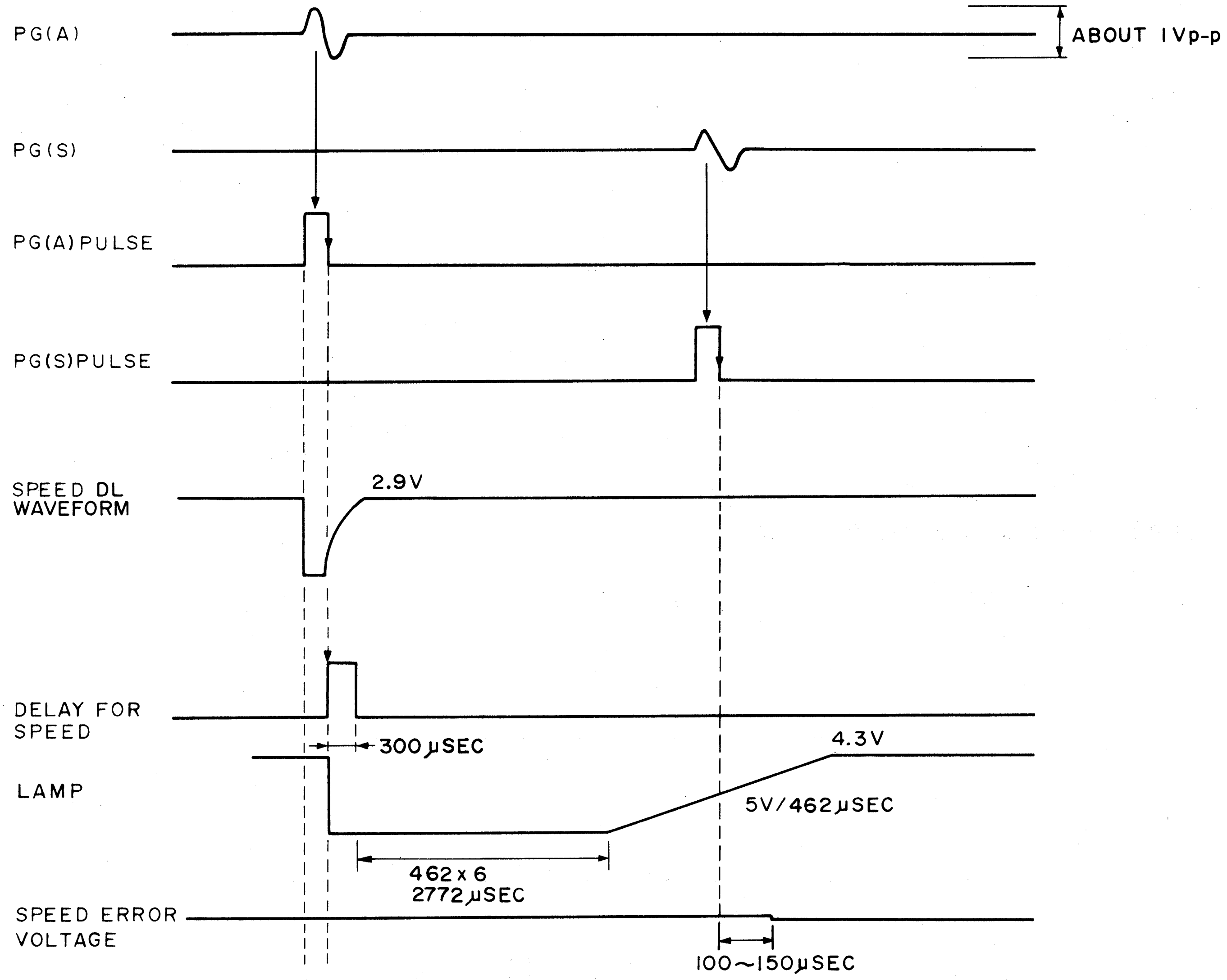

FG(1)
FG(2)
80mVp-p
1.43msec
FG AMP OUT(1)
FG AMP OUT(2)
IC301 ⑱
IC301 ⑰
RAMP
5V/2.77msec
ERROR VOLTAGE

3-19. DRUM PHASE SYSTEM TIMING CHART

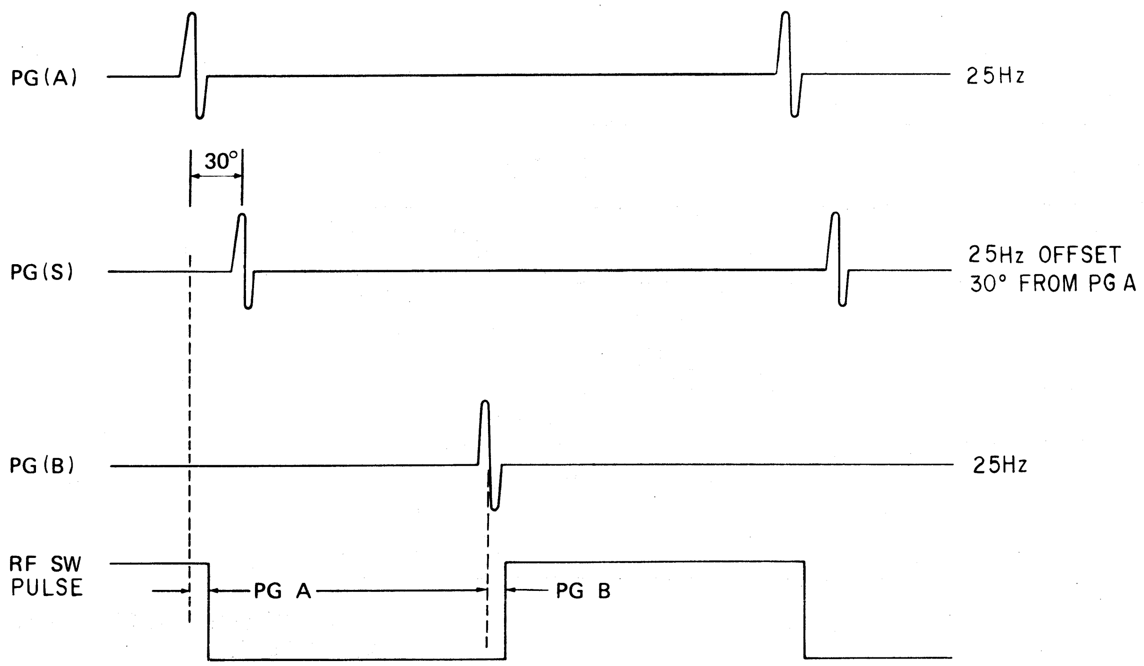

PG (B)
PG·DL (BCH)
324μS
REF·VD
INT VD
τ1 137μS
REC CTL
VG DL
RAMP
5V/1.85mS
τ2
τ3
RF SW·P
577μS
416μS
PHASE ERROR VOLTAGE
τ4
5mS
AF PG

τ_1 REF VD DETECTION DELAY TIME
$\tau_{2,3}$ DIGITAL DL
τ_4 DATA EXCHANGE TIME

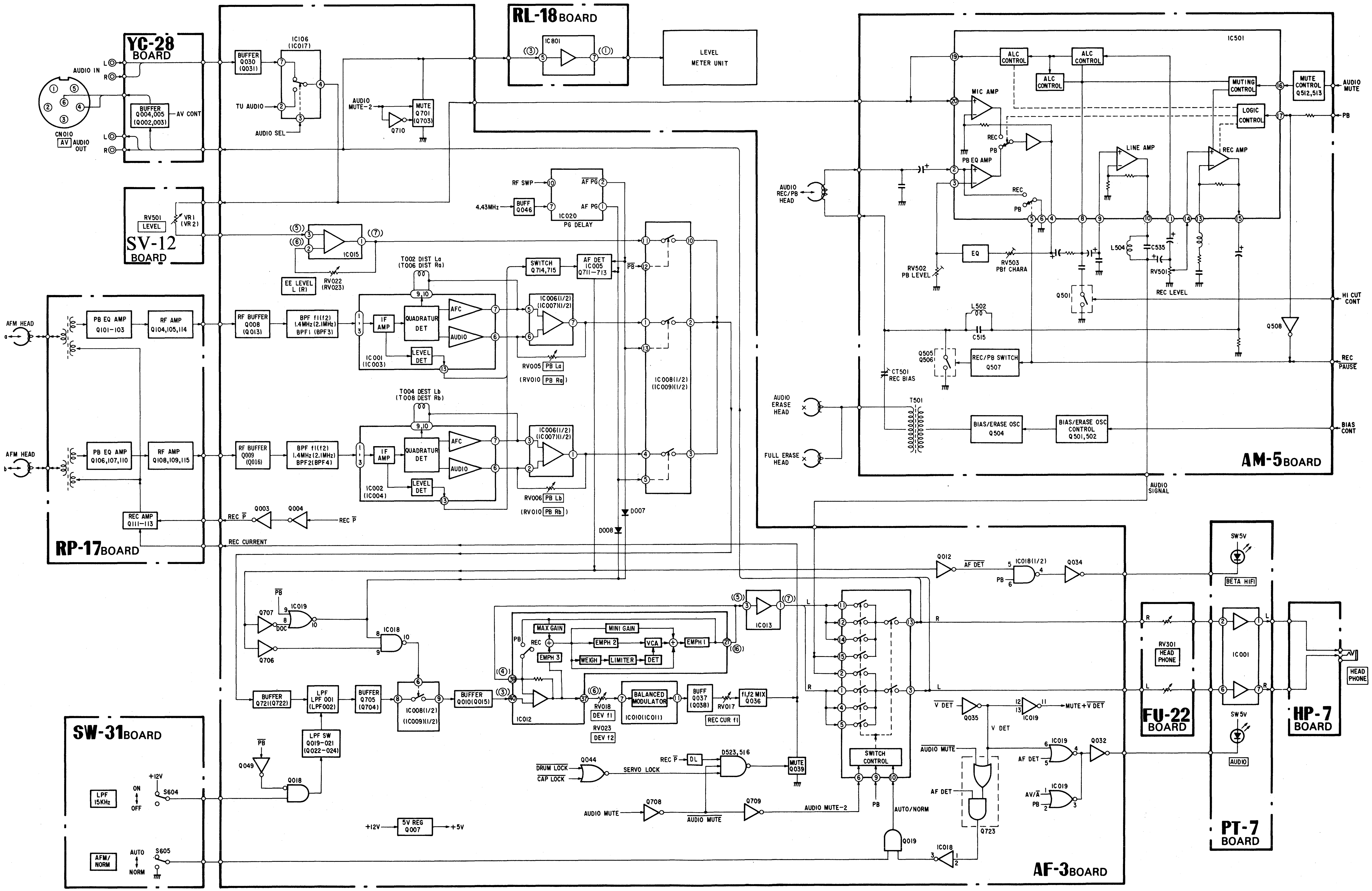
3-20. DRUM SPEED SYSTEM TIMING CHART


PG(A)
ABOUT 1Vp-p
PG(S)
PG(A)PULSE
PG(S)PULSE
SPEED DL WAVEFORM
2.9V
DELAY FOR SPEED
300µSEC
4.3V
LAMP
5V/462µSEC
462 x 6
2772µSEC
SPEED ERROR VOLTAGE
100~150µSEC

3-21. PG SIGNAL TIMING CHART


PG(A)
25Hz
30°
PG(S)
25Hz OFFSET
30° FROM PG A
PG(B)
25Hz
RF SW PULSE
PG A
PG B

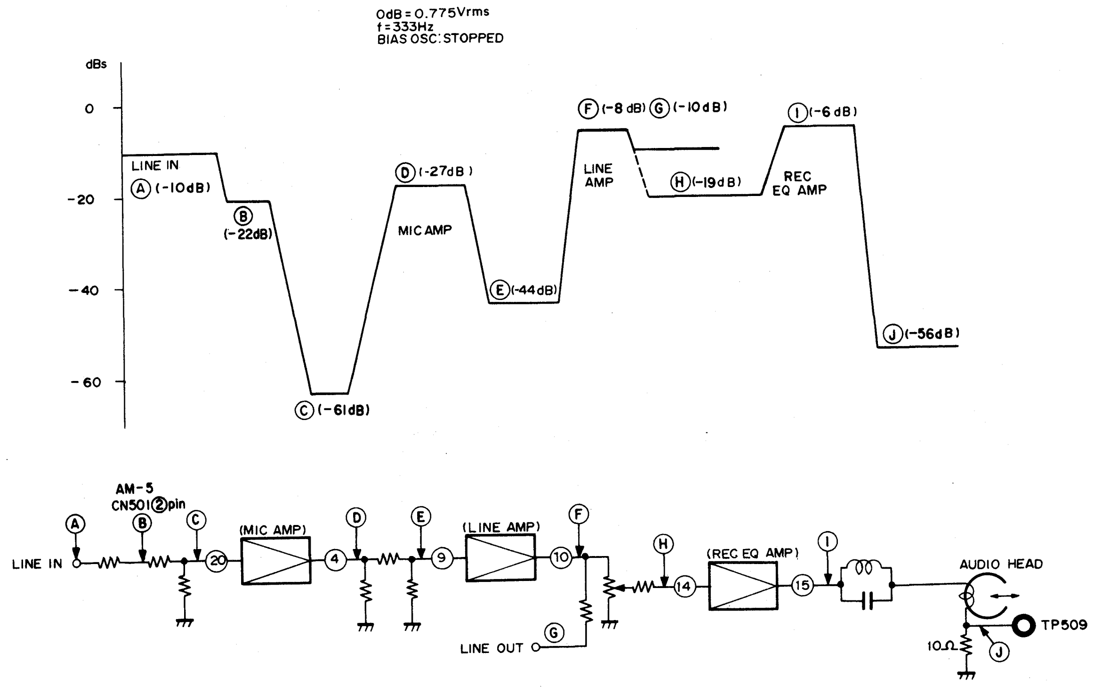
3-22. AUDIO BLOCK DIAGRAM



YC-28 BOARD
AUDIO IN
L
R
CN010
AV AUDIO OUT
BUFFER Q004,005 (Q002,003)
AV CONT
SV-12 BOARD
RV501 LEVEL
VR1 (VR2)
RP-17 BOARD
AFM HEAD a
AFM HEAD b
PB EQ AMP Q101-103
RF AMP Q104,105,114
PB EQ AMP Q106,107,110
RF AMP Q108,109,115
REC AMP Q111-113
SW-31 BOARD
LPF 15KHz
AFM/NORM
ON OFF S604
AUTO NORM S605
+12V
RL-18 BOARD
IC801
LEVEL METER UNIT
BUFFER Q030 (Q031)
IC106 (IC017)
TU AUDIO
AUDIO SEL
AUDIO MUTE-2
MUTE Q701 (Q703)
Q710
RF SWP
4.43MHz
BUFF Q046
IC020 PG DELAY
AF PG
IC015
EE LEVEL L (R)
RV022 (RV023)
T002 DIST La (T006 DIST Ra)
T004 DEST Lb (T008 DEST Rb)
RF BUFFER Q008 (Q013)
RF BUFFER Q009 (Q016)
BPF f1(f2) 1.4MHz(2.1MHz) BPF1 (BPF3)
BPF f1(f2) 1.4MHz(2.1MHz) BPF2(BPF4)
IF AMP
QUADRATUR DET
AFC
AUDIO
LEVEL DET
IC001 (IC003)
IC002 (IC004)
SWITCH Q714,715
AF DET IC005 Q711-713
IC006(1/2) (IC007(1/2))
RV005 PB La
(RV010 PB Ra)
RV006 PB Lb
(RV010 PB Rb)
IC008(1/2) (IC009(1/2))
D007
D008
REC P
Q003
Q004
REC CURRENT
PB
Q707
IC019
DOC
Q706
IC018
BUFFER Q721(Q722)
LPF LPF 001 (LPF002)
BUFFER Q705 (Q704)
IC008(1/2) (IC009(1/2))
BUFFER Q010(Q015)
LPF SW Q019-021 (Q022-024)
Q049
Q018
+12V 5V REG Q007 +5V
IC012
MAX GAIN
MINI GAIN
EMPH 2
VCA
EMPH 1
EMPH 3
WEIGH
LIMITER
DET
BALANCED MODULATOR
IC010(IC011)
BUFF Q037 (Q038)
RV017
f1,f2 MIX Q036
REC CUR f1
RV018 DEV f1
RV023 DEV f2
DRUM LOCK
CAP LOCK
Q044
SERVO LOCK
REC P
DL
D523,516
MUTE Q039
AUDIO MUTE
Q708
Q709
AUDIO MUTE
AUDIO MUTE-2
IC013
SWITCH CONTROL
AUTO/NORM
Q019
IC018
Q012
AF DET
IC018(1/2)
Q034
V DET
Q035
IC019
MUTE+V DET
AUDIO MUTE
AF DET
IC019
Q032
AV/A
Q723
AF-3 BOARD
AM-5 BOARD
IC501
ALC CONTROL
MUTING CONTROL
MUTE CONTROL Q512,513
LOGIC CONTROL
AUDIO MUTE
MIC AMP
REC PB
PB EQ AMP
LINE AMP
REC AMP
AUDIO REC/PB HEAD
EQ
RV503 PBf CHARA
RV502 PB LEVEL
L504
C535
RV501
REC LEVEL
Q501
L502
C515
HI CUT CONT
Q508
Q505 Q506
REC/PB SWITCH Q507
REC PAUSE
CT501 REC BIAS
AUDIO ERASE HEAD
FULL ERASE HEAD
T501
BIAS/ERASE OSC Q504
BIAS/ERASE OSC CONTROL Q501,502
BIAS CONT
AUDIO SIGNAL
FU-22 BOARD
RV301 HEAD PHONE
PT-7 BOARD
SW5V
BETA HIFI
IC001
AUDIO
HP-7 BOARD
HEAD PHONE

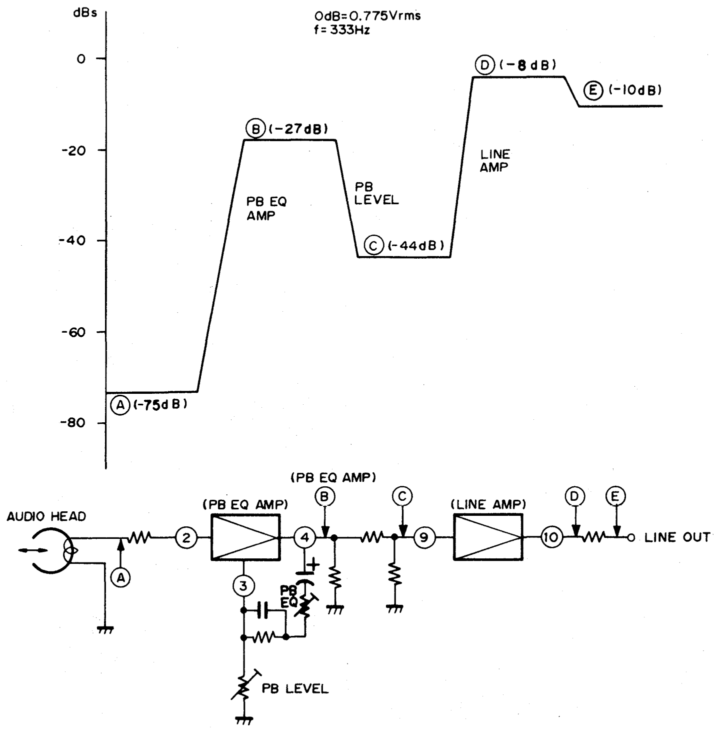
3-23. AUDIO LEVEL DIAGRAM (REC)

REC MODE


0dB=0.775Vrms
f=333Hz
BIAS OSC:STOPPED
dBs
0
-20
-40
-60
LINE IN
Ⓐ (-10dB)
Ⓑ (-22dB)
Ⓒ (-61dB)
MIC AMP
Ⓓ (-27dB)
Ⓔ (-44dB)
LINE AMP
Ⓕ (-8 dB) Ⓖ (-10dB)
Ⓗ (-19dB)
REC EQ AMP
Ⓘ (-6 dB)
Ⓙ (-56dB)
AM-5
CN501 ② pin
LINE IN
(MIC AMP)
(LINE AMP)
(REC EQ AMP)
LINE OUT
AUDIO HEAD
TP509
10Ω
⑳ ④ ⑨ ⑩ ⑭ ⑮

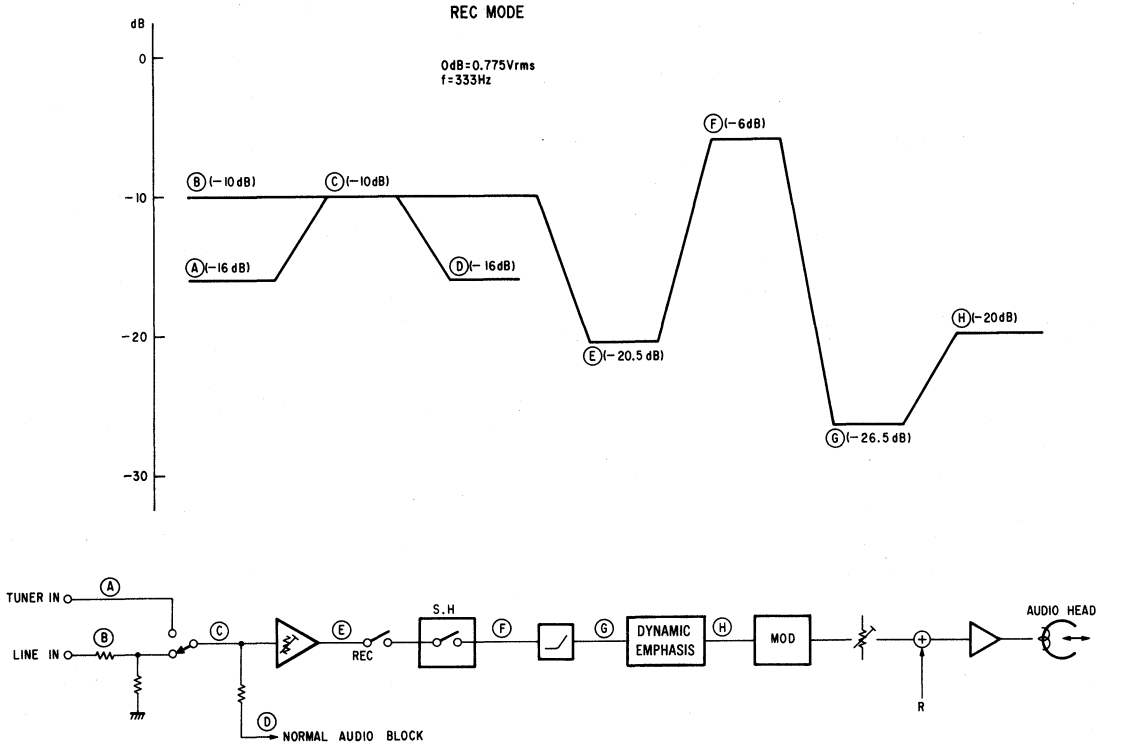
3-24. AUDIO LEVEL DIAGRAM (PB)

PB MODE


0dB=0.775Vrms
f=333Hz
dBs
0
-20
-40
-60
-80
Ⓐ (-75dB)
PB EQ AMP
Ⓑ (-27dB)
PB LEVEL
Ⓒ (-44dB)
LINE AMP
Ⓓ (-8 dB)
Ⓔ (-10dB)
AUDIO HEAD
(PB EQ AMP)
(LINE AMP)
PB EQ
PB LEVEL
LINE OUT
② ③ ④ ⑨ ⑩

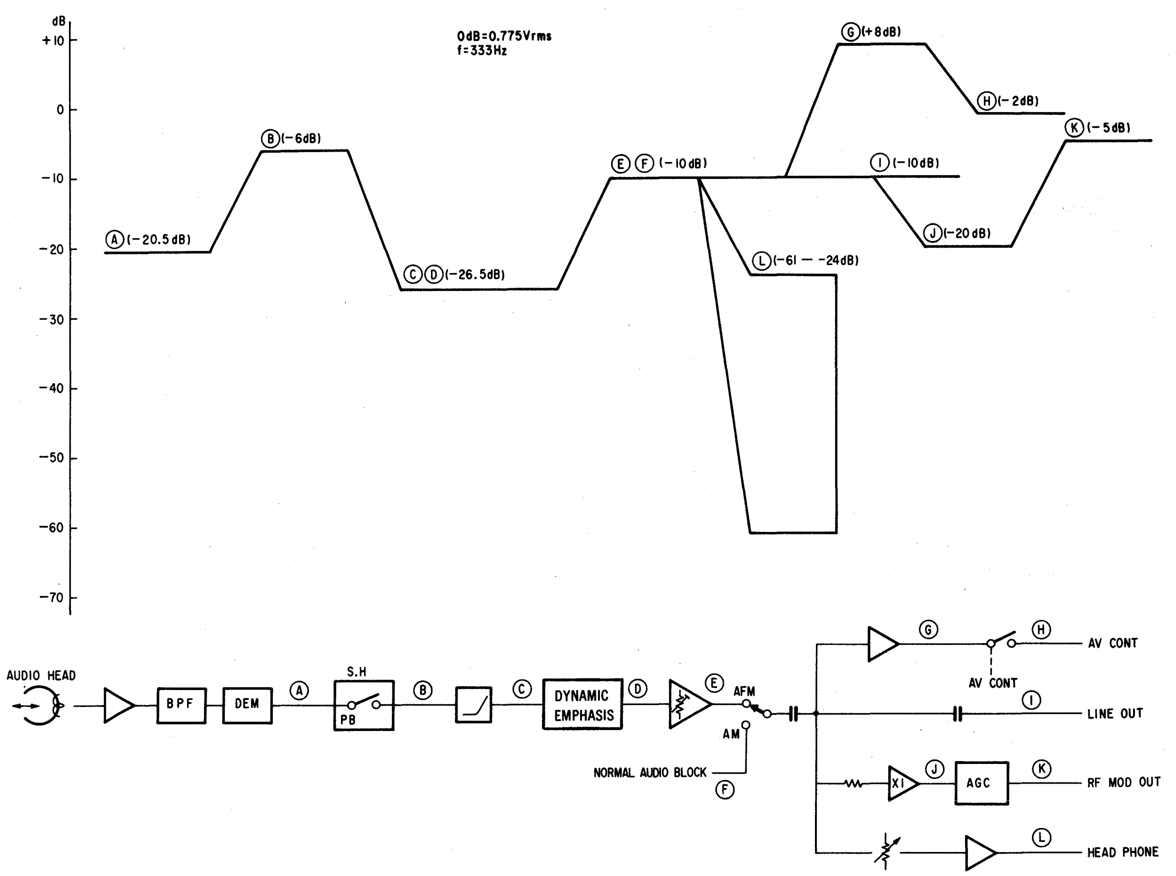
3-25. AFM LEVEL DIAGRAM (REC)

REC MODE

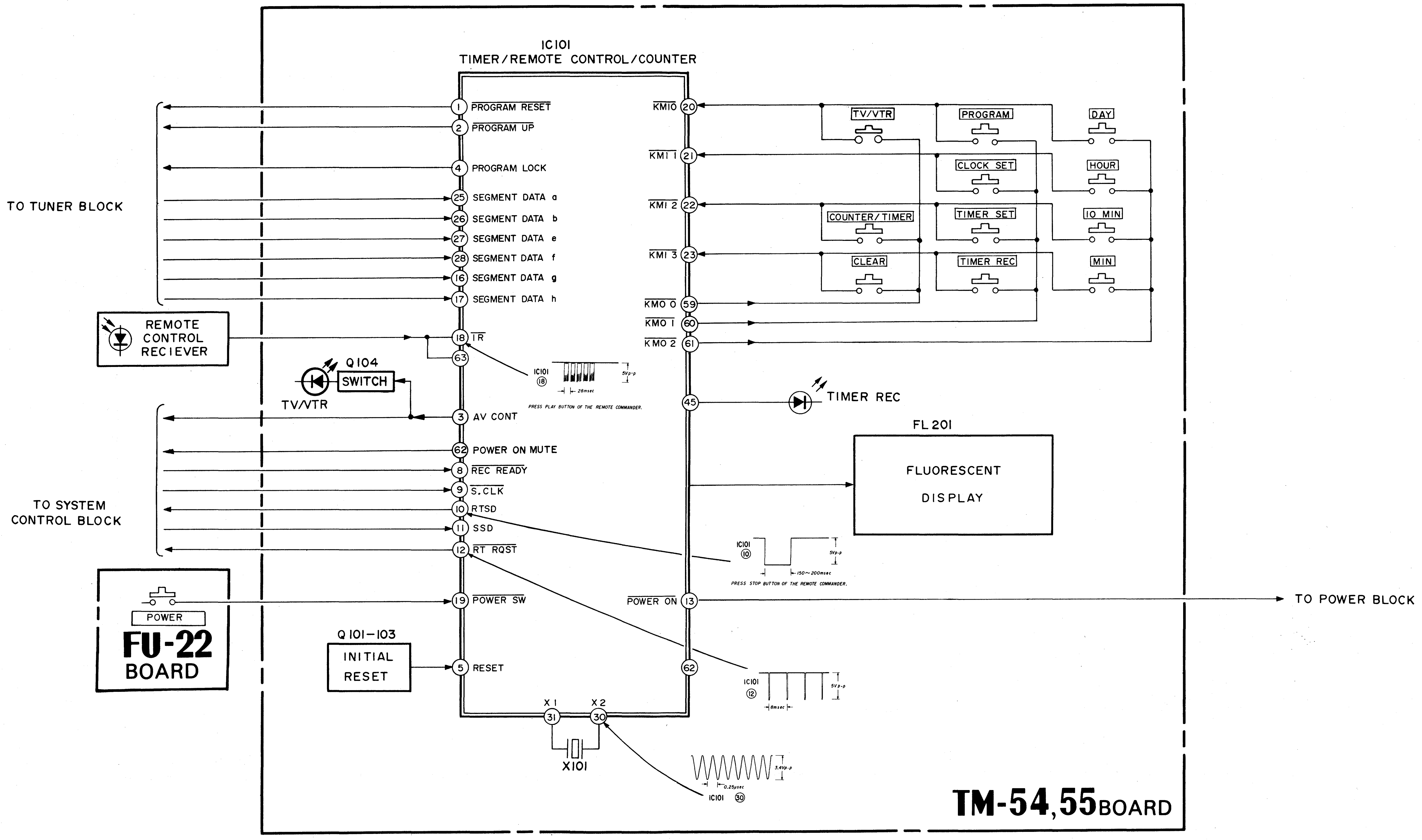

0dB=0.775Vrms
f=333Hz
dB
0
-10
-20
-30
Ⓐ (-16 dB)
Ⓑ (-10dB)
Ⓒ (-10dB)
Ⓓ (-16dB)
Ⓔ (-20.5 dB)
Ⓕ (-6dB)
Ⓖ (-26.5 dB)
Ⓗ (-20dB)
TUNER IN
LINE IN
REC
S.H
DYNAMIC EMPHASIS
MOD
R
AUDIO HEAD
NORMAL AUDIO BLOCK

3-26. AFM LEVEL DIAGRAM (PB)

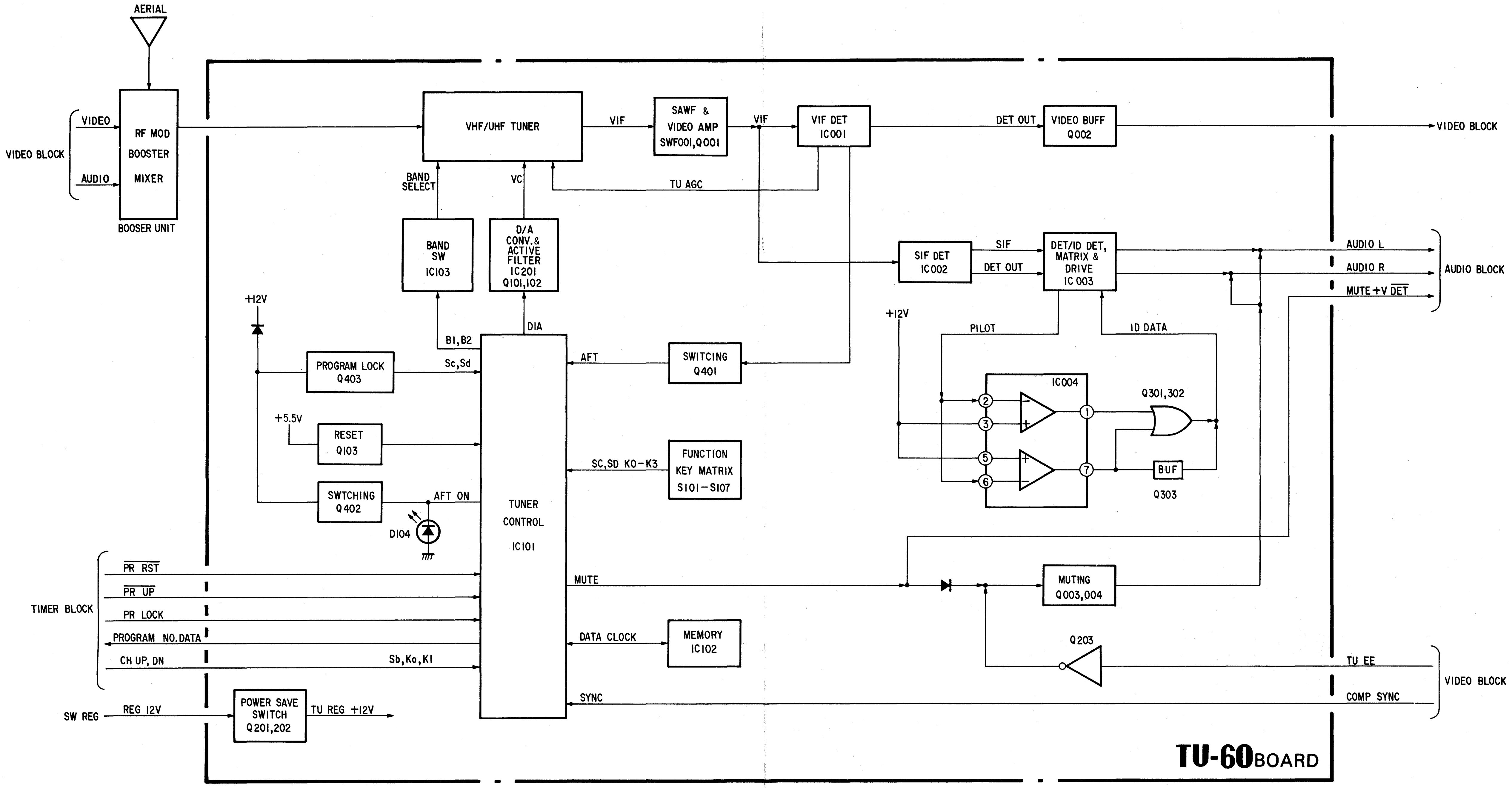
PB MODE


0dB=0.775Vrms
f=333Hz
dB
+10
0
-10
-20
-30
-40
-50
-60
-70
Ⓐ (-20.5dB)
Ⓑ (-6dB)
Ⓒ Ⓓ (-26.5dB)
Ⓔ Ⓕ (-10dB)
Ⓖ (+8dB)
Ⓗ (-2dB)
Ⓘ (-10dB)
Ⓙ (-20dB)
Ⓚ (-5dB)
Ⓛ (-61 — -24dB)
AUDIO HEAD
BPF
DEM
S.H
PB
DYNAMIC EMPHASIS
AFM
AM
NORMAL AUDIO BLOCK
AV CONT
LINE OUT
XI
AGC
RF MOD OUT
HEAD PHONE

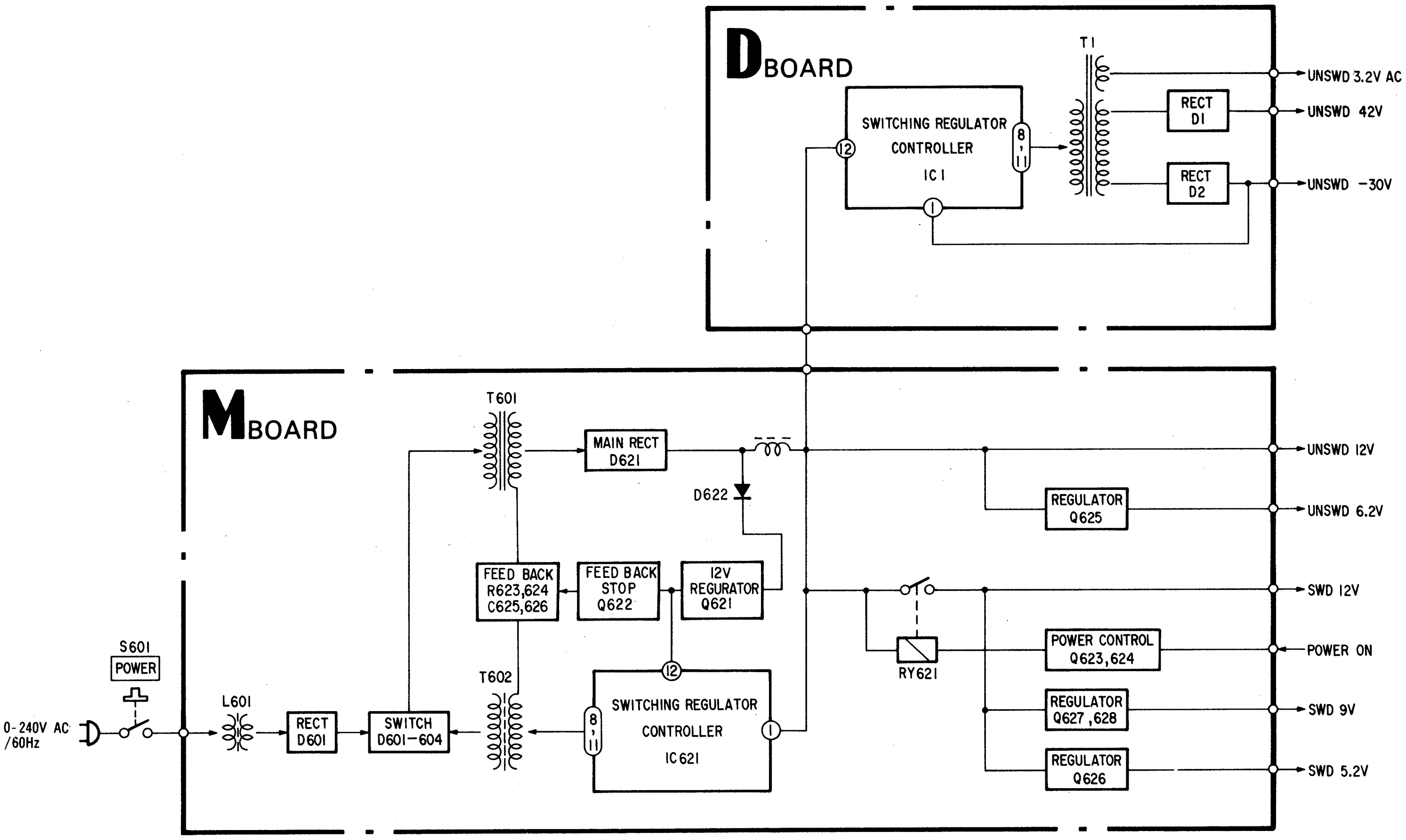
3-27. TIMER BLOCK DIAGRAM


IC101
TIMER/REMOTE CONTROL/COUNTER
TO TUNER BLOCK
1 PROGRAM RESET
2 PROGRAM UP
4 PROGRAM LOCK
25 SEGMENT DATA a
26 SEGMENT DATA b
27 SEGMENT DATA e
28 SEGMENT DATA f
16 SEGMENT DATA g
17 SEGMENT DATA h
REMOTE CONTROL RECIEVER
18 TR
63
Q104
SWITCH
TV/VTR
IC101 (18)
5Vp-p
28msec
PRESS PLAY BUTTON OF THE REMOTE COMMANDER.
3 AV CONT
TO SYSTEM CONTROL BLOCK
62 POWER ON MUTE
8 REC READY
9 S.CLK
10 RTSD
11 SSD
12 RT RQST
POWER
FU-22 BOARD
19 POWER SW
Q101–103
INITIAL RESET
5 RESET
X1
X2
31
30
X101
KMI0 20
KMI 1 21
KMI 2 22
KMI 3 23
KMO 0 59
KMO 1 60
KMO 2 61
TV/VTR
PROGRAM
DAY
CLOCK SET
HOUR
COUNTER/TIMER
TIMER SET
10 MIN
CLEAR
TIMER REC
MIN
45
TIMER REC
FL201
FLUORESCENT DISPLAY
IC101 (10)
5Vp-p
150～200msec
PRESS STOP BUTTON OF THE REMOTE COMMANDER.
POWER ON 13
TO POWER BLOCK
62
IC101 (12)
5Vp-p
8msec
3.4Vp-p
0.25μsec
IC101 (30)
TM-54,55BOARD

3-28. TUNER BLOCK DIAGRAM

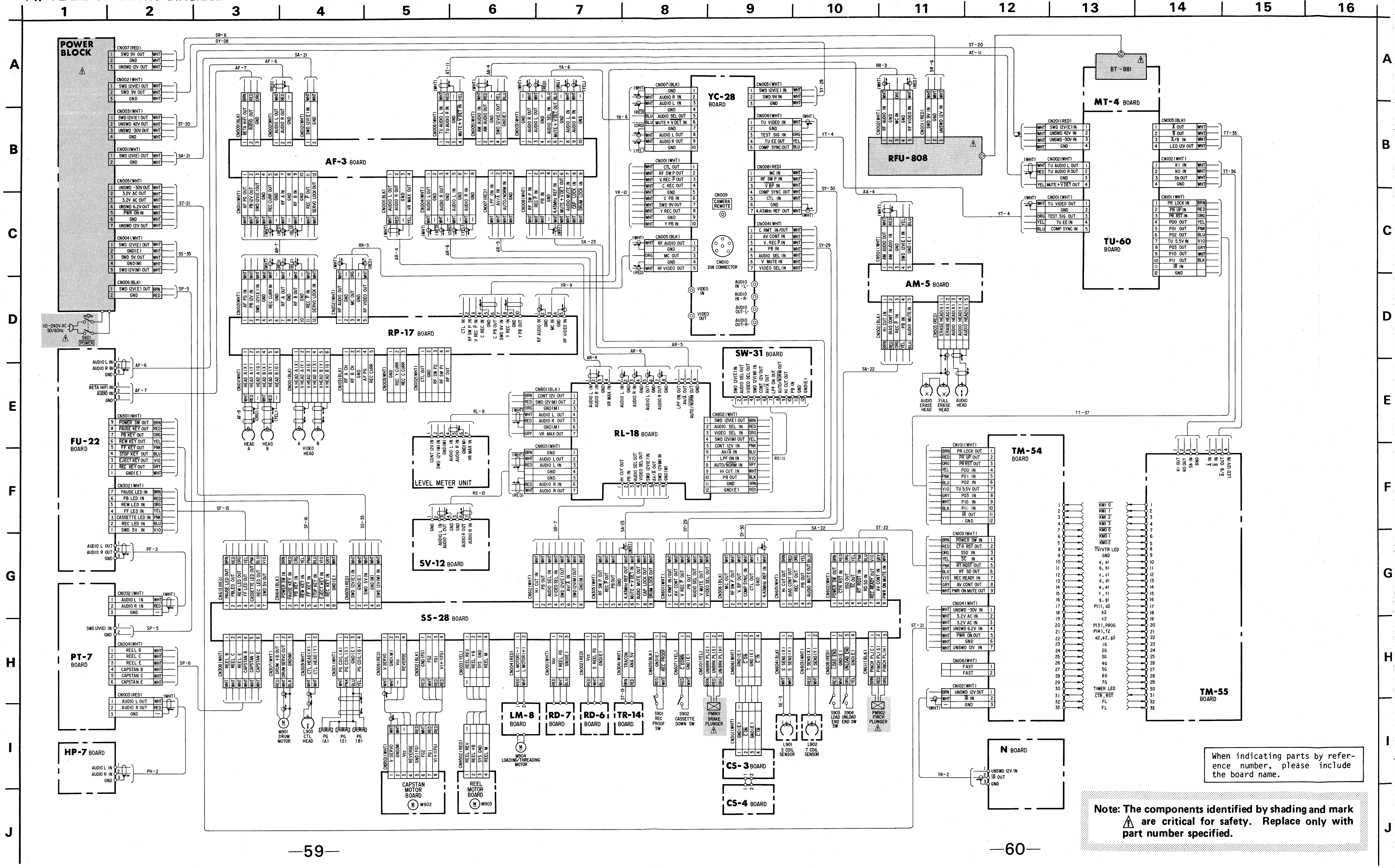

AERIAL
VIDEO BLOCK
VIDEO
AUDIO
RF MOD
BOOSTER
MIXER
BOOSER UNIT
VHF/UHF TUNER
VIF
SAWF &
VIDEO AMP
SWF001,Q001
VIF
VIF DET
IC001
DET OUT
VIDEO BUFF
Q002
VIDEO BLOCK
BAND SELECT
VC
TU AGC
BAND SW
IC103
D/A CONV.&
ACTIVE FILTER
IC201
Q101,102
SIF DET
IC002
SIF
DET OUT
DET/ID DET,
MATRIX &
DRIVE
IC 003
AUDIO L
AUDIO R
MUTE+V DET
AUDIO BLOCK
+12V
B1,B2
DIA
+12V
PILOT
ID DATA
PROGRAM LOCK
Q403
Sc,Sd
AFT
SWITCING
Q401
IC004
Q301,302
+5.5V
RESET
Q103
BUF
Q303
SC,SD KO-K3
FUNCTION
KEY MATRIX
S101-S107
SWTCHING
Q402
AFT ON
D104
TUNER
CONTROL
IC101
PR RST
PR UP
PR LOCK
PROGRAM NO.DATA
CH UP, DN
Sb,Ko,Kl
TIMER BLOCK
MUTE
MUTING
Q003,004
DATA CLOCK
MEMORY
IC102
Q203
TU EE
VIDEO BLOCK
SYNC
COMP SYNC
SW REG
REG 12V
POWER SAVE
SWITCH
Q201,202
TU REG +12V
TU-60BOARD

3-29. POWER BLOCK DIAGRAM


D BOARD
T1
SWITCHING REGULATOR
CONTROLLER
IC1
12
8, 11
1
RECT D1
RECT D2
UNSWD 3.2V AC
UNSWD 42V
UNSWD -30V
M BOARD
T601
MAIN RECT D621
D622
UNSWD 12V
REGULATOR Q625
UNSWD 6.2V
FEED BACK R623,624 C625,626
FEED BACK STOP Q622
12V REGURATOR Q621
SWD 12V
RY621
POWER CONTROL Q623,624
POWER ON
S601
POWER
0-240V AC /60Hz
L601
RECT D601
SWITCH D601–604
T602
12
8, 11
SWITCHING REGULATOR
CONTROLLER
IC621
1
REGULATOR Q627,628
SWD 9V
REGULATOR Q626
SWD 5.2V

SECTION 4
SCHEMATIC DIAGRAM AND PRINTED WIRING BOARDS

4-1. FLAME SCHEMATIC DIAGRAM


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
POWER BLOCK
110-240V AC 50/60Hz
S601 POWER
AF-3 BOARD
RP-17 BOARD
YC-28 BOARD
RFU-808
BT-881
MT-4 BOARD
TU-60 BOARD
AM-5 BOARD
SW-31 BOARD
RL-18 BOARD
LEVEL METER UNIT
SV-12 BOARD
FU-22 BOARD
PT-7 BOARD
HP-7 BOARD
SS-28 BOARD
TM-54 BOARD
TM-55 BOARD
N BOARD
LM-8 BOARD
RD-7 BOARD
RD-6 BOARD
TR-14 BOARD
CS-3 BOARD
CS-4 BOARD
CAPSTAN MOTOR BOARD
REEL MOTOR BOARD
M901 DRUM MOTOR
L903 CTL HEAD
M902
M903
M904 LOADING/THREADING MOTOR
S901 REC PROOF SW
S902 CASSETTE DOWN SW
PM901 BRAKE PLUNGER
S903 LOAD END SW
S904 UNLOAD END SW
PM902 PINCH PLUNGER
L901 S COIL SENSOR
L902 T COIL SENSOR
HEAD A
HEAD B
VIDEO HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO HEAD
CN009 CAMERA REMOTE
CN010 DIN CONNECTOR
VIDEO IN
VIDEO OUT
AUDIO IN -L-
AUDIO IN -R-
AUDIO OUT-L
AUDIO OUT-R

When indicating parts by reference number, please include the board name.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

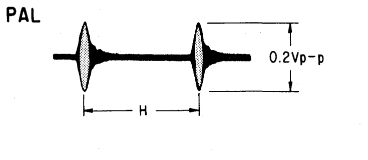
15 | 16

A B C D E F G H I J

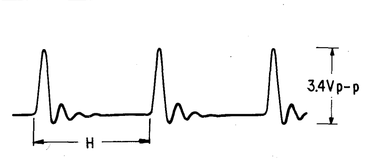
ı indicating parts by refer-
ɔ number, please include
board name.

tified by shading and mark
fety. Replace only with
l.

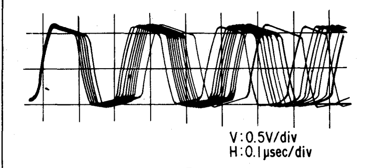
YC-28 BOARD (PAL/SECAM)



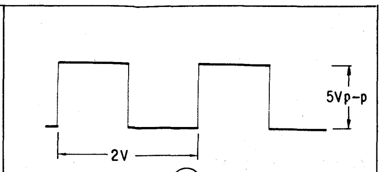
IC002 ⑦ REC/PB



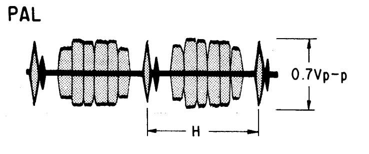
IC006 ㉘ BF PB



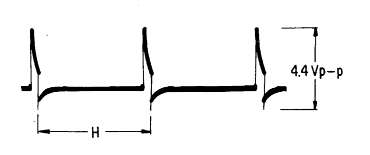
IC009 ㉕ REC



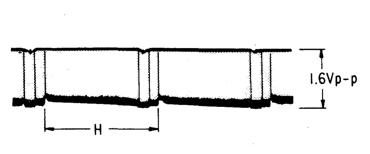
CN008 ② REC / PB



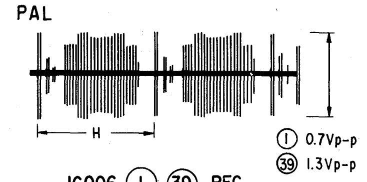
IC004 ⑧ PB



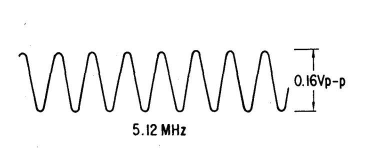
IC006 ㉚ REC/PB



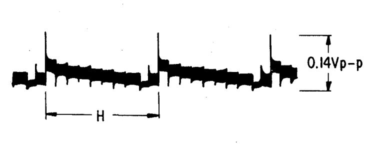
IC009 ㉙ PB



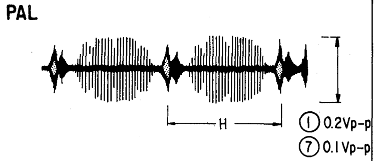
IC006 ①, ㊴ REC



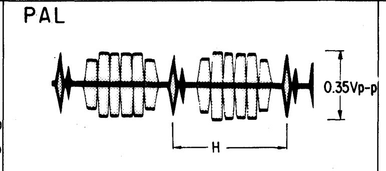
IC006 ㉝ REC / PB



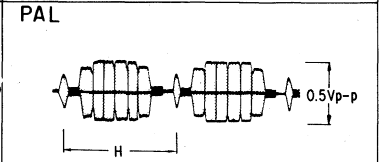
IC009 ㉚ REC



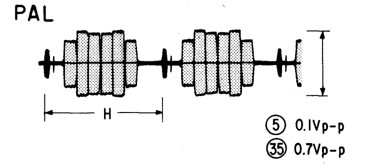
IC006 ①, ⑦, ㉟ PB



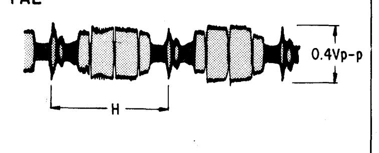
IC006 ㊲ PB



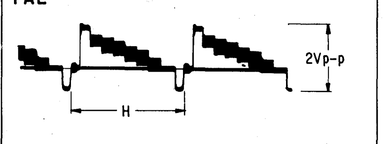
IC009 ㉜ PB



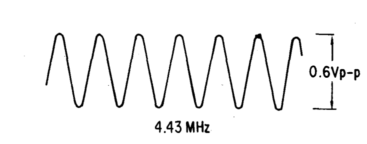
IC006 ⑤, ㉟ REC



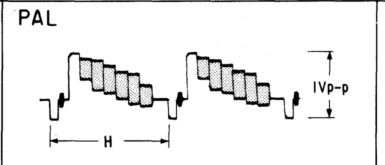
IC006 ㊴ PB



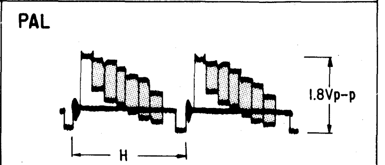
IC009 ㉟ REC



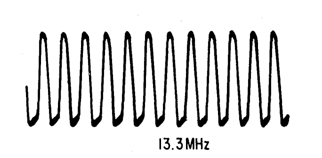
IC006 ⑭ REC / PB



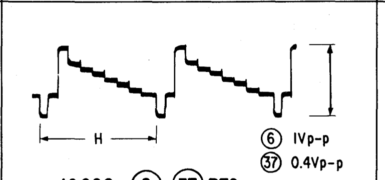
IC009 ③ REC



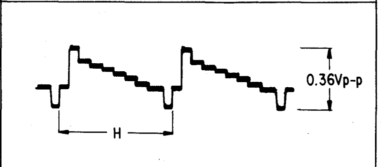
IC009 ㉟ PB



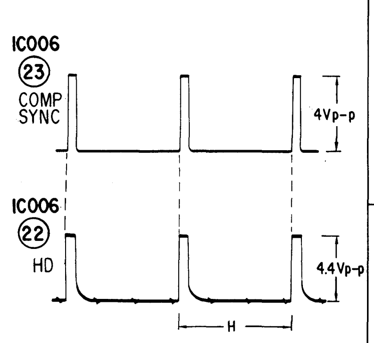
IC006 ⑲ REC/PB



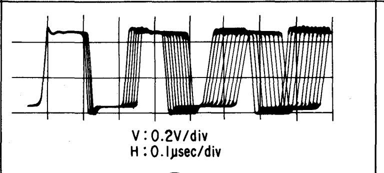
IC009 ⑥, ㊲ REC



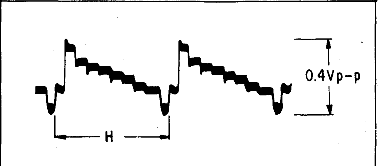
IC009 ㊳ PB



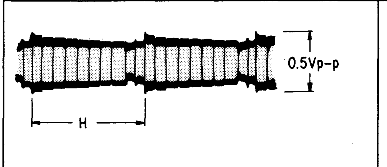
REC / PB



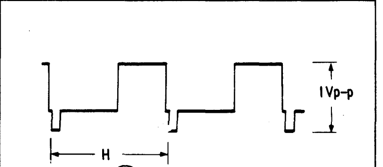
IC009 ⑱ PB



IC401 ㉖ PB

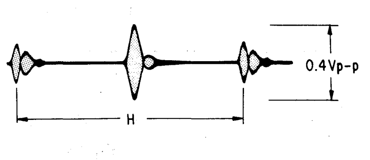


IC009 ㉑ PB

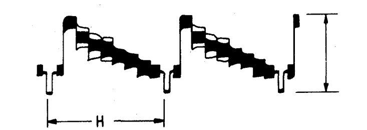


CN005 ⑥ TEST SIGNAL

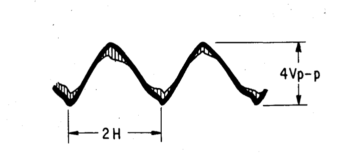
YC-28 BOARD (SECAM)



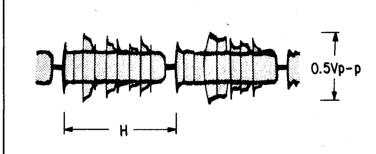
IC002 ⑦ REC/PB



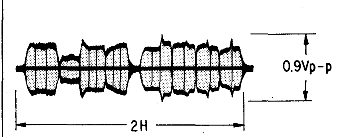
IC 009 ③ REC 1Vp-p
IC 009 ㉟ REC 1.8Vp-p



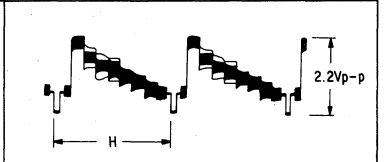
IC 002 ⑨ REC/PB



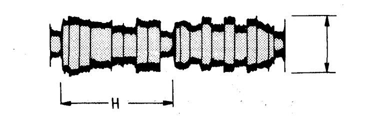
IC 009 ㉜ PB



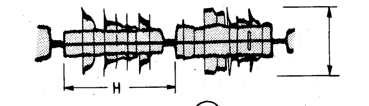
IC 004 ⑧ REC
IC 009 ㉜ REC



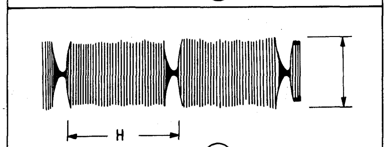
IC 009 ㉟ PB



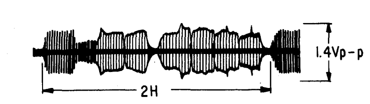
IC004 ⑧ PB 0.7Vp-p
IC 006 ㊲ PB 0.1Vp-p



IC 006 ① REC 1Vp-p
IC 006 ⑤ REC 0.09Vp-p
IC 006 ㉟ REC 1Vp-p

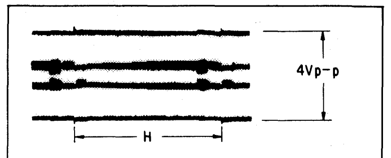


IC 006 ① PB 0.2Vp-p
IC 006 ⑦ PB 0.1Vp-p

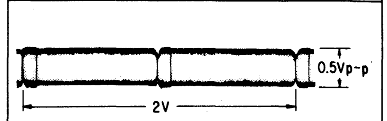


IC 006 ㊴ REC

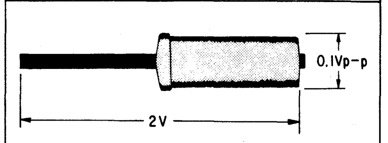
RP-17 BOARD (PAL/SECAM)



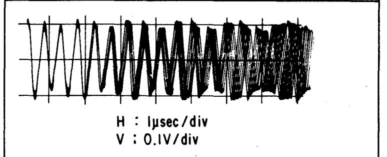
IC001 ④, ㉕ REC



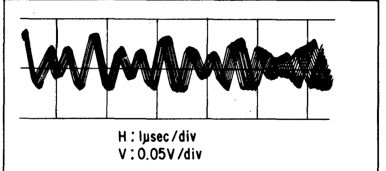
IC001 ⑭ PB



IC001 ⑯, ⑲ PB



CN101 ①-②, ④-⑤ REC



CN103 ①, ② PB

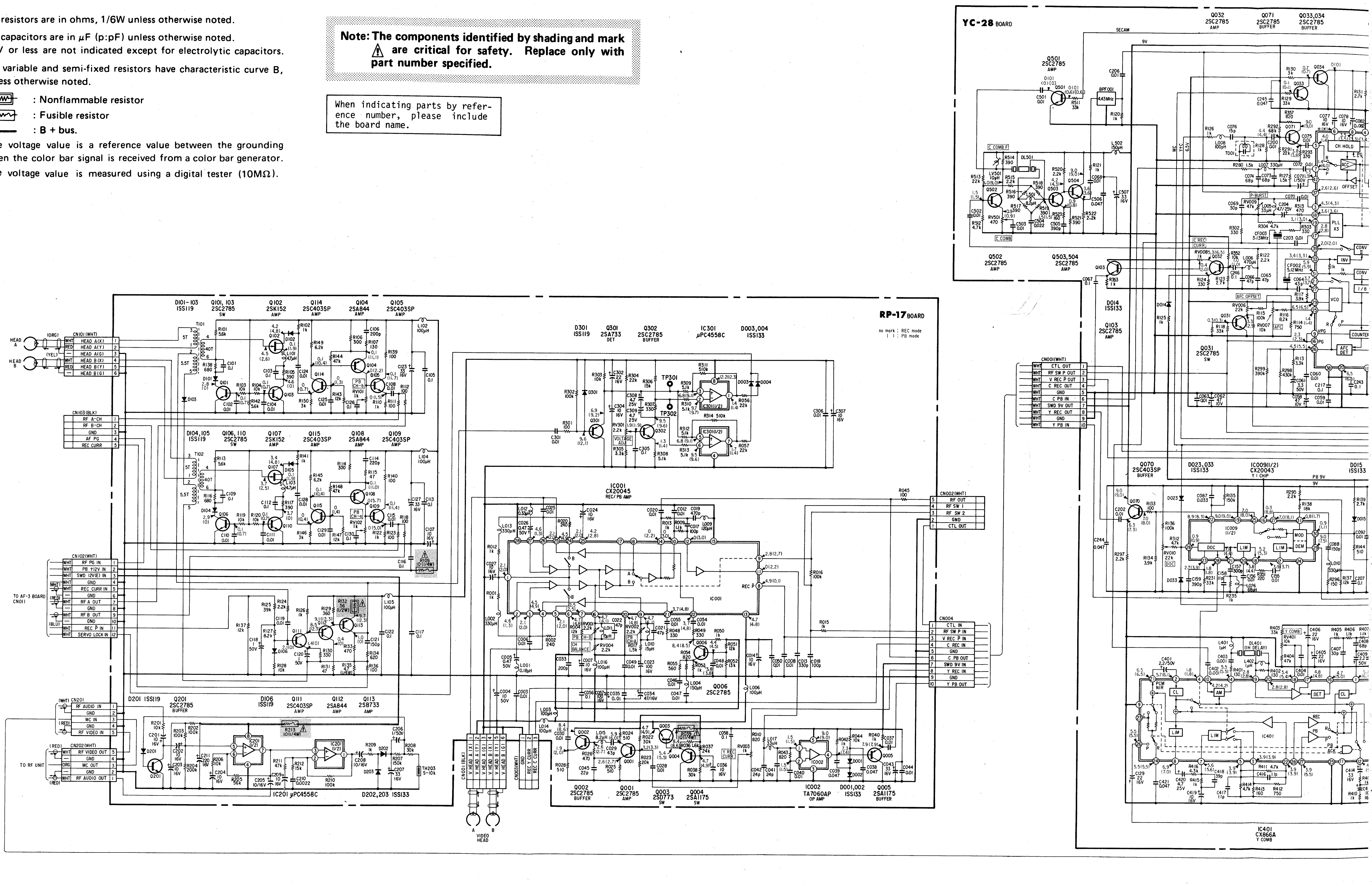
4-2. RP-17 (LOW-CONVERTED CHROMA, Y-FM & AFM SIGNALS, RECORD/PLAYBACK AMP), YC-28 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS) SCHEMATIC DIAGRAM

– Ref. No. RP-17 BOARD : 2000 series, YC-28 BOARD : 1000 series –

- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▨ : Nonflammable resistor
- ∿ : Fusible resistor
- —— : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.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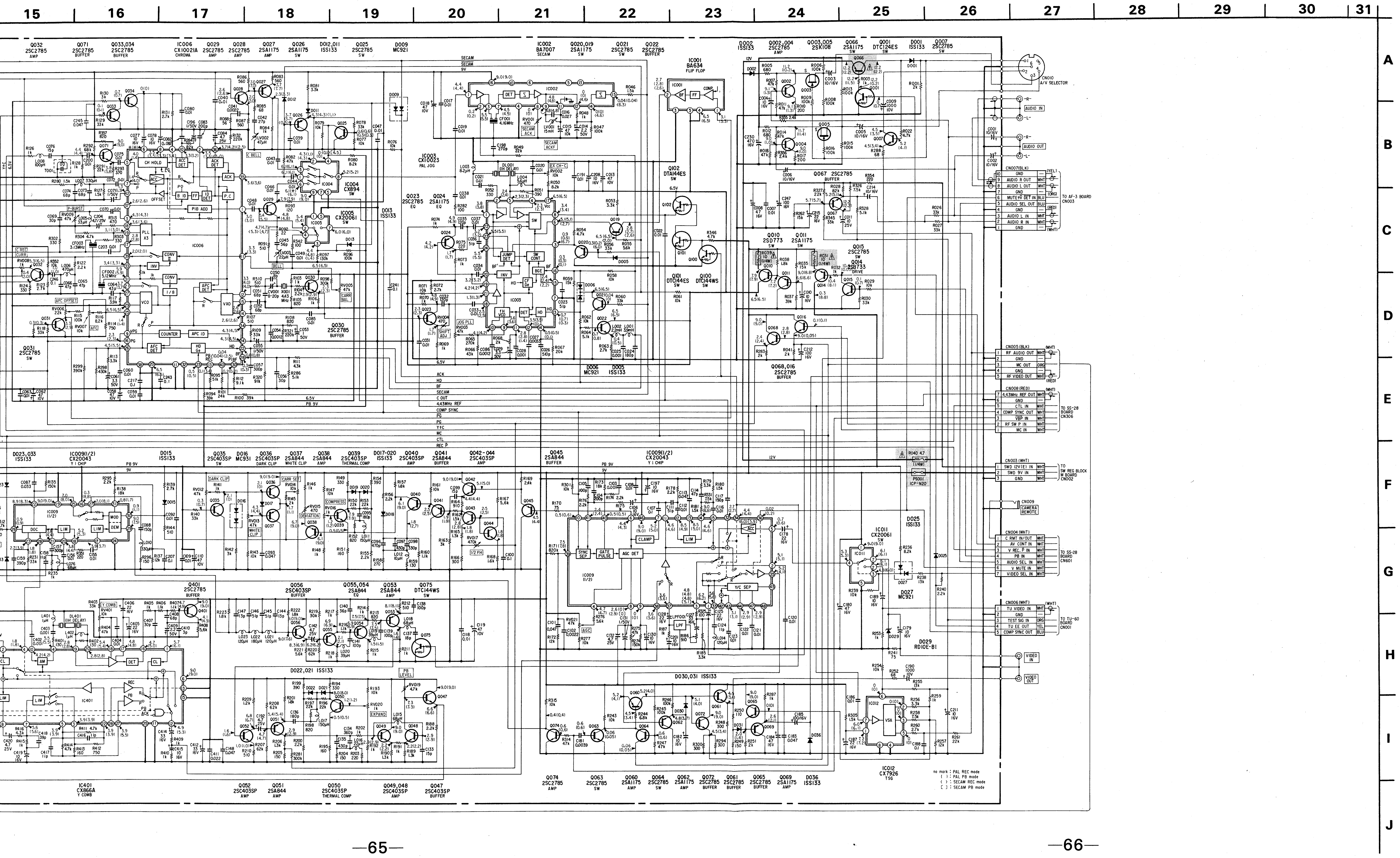
YC-28 BOARD
RP-17 BOARD
HEAD A
HEAD B
CN101 (WHT)
CN103 (BLK)
CN102 (WHT)
TO AF-3 BOARD CN011
CN201
CN202 (WHT)
TO RF UNIT
D101-103 1SS119
Q101,103 2SC2785 SW
Q102 2SK152 AMP
Q114 2SC403SP AMP
Q104 2SA844 AMP
Q105 2SC403SP AMP
D104,105 1SS119
Q106,110 2SC2785 SW
Q107 2SK152 AMP
Q115 2SC403SP AMP
Q108 2SA844 AMP
Q109 2SC403SP AMP
D201 1SS119
Q201 2SC2785 BUFFER
D106 1SS119
Q111 2SC403SP AMP
Q112 2SA844 AMP
Q113 2SB733 AMP
IC201 μPC4558C
D202,203 1SS133
D301 1SS119
Q301 2SA733 DET
Q302 2SC2785 BUFFER
IC301 μPC4558C
D003,004 1SS133
IC001 CX20045 REC/PB AMP
Q002 2SC2785 BUFFER
Q001 2SC2785 AMP
Q003 2SD773 SW
Q004 2SA1175 SW
IC002 TA7060AP OP AMP
D001,002 1SS133
Q005 2SA1175 BUFFER
Q006 2SC2785
CN001 (BLK)
CN003 (WHT)
CN002 (WHT)
CN004
VIDEO HEAD A B
Q501 2SC2785 AMP
Q502 2SC2785 AMP
Q503,504 2SC2785 AMP
Q032 2SC2785 AMP
Q071 2SC2785 BUFFER
Q033,034 2SC2785 BUFFER
D014 1SS133
Q103 2SC2785 AMP
Q031 2SC2785 SW
Q070 2SC403SP BUFFER
D023,033 1SS133
IC009 (1/2) CX20043 Y I CHIP
D015 1SS133
IC401 CX866A Y COMB
CN001 (WHT)
SECAM
no mark : REC mode
( ) : PB mode

VIDEO VIDEO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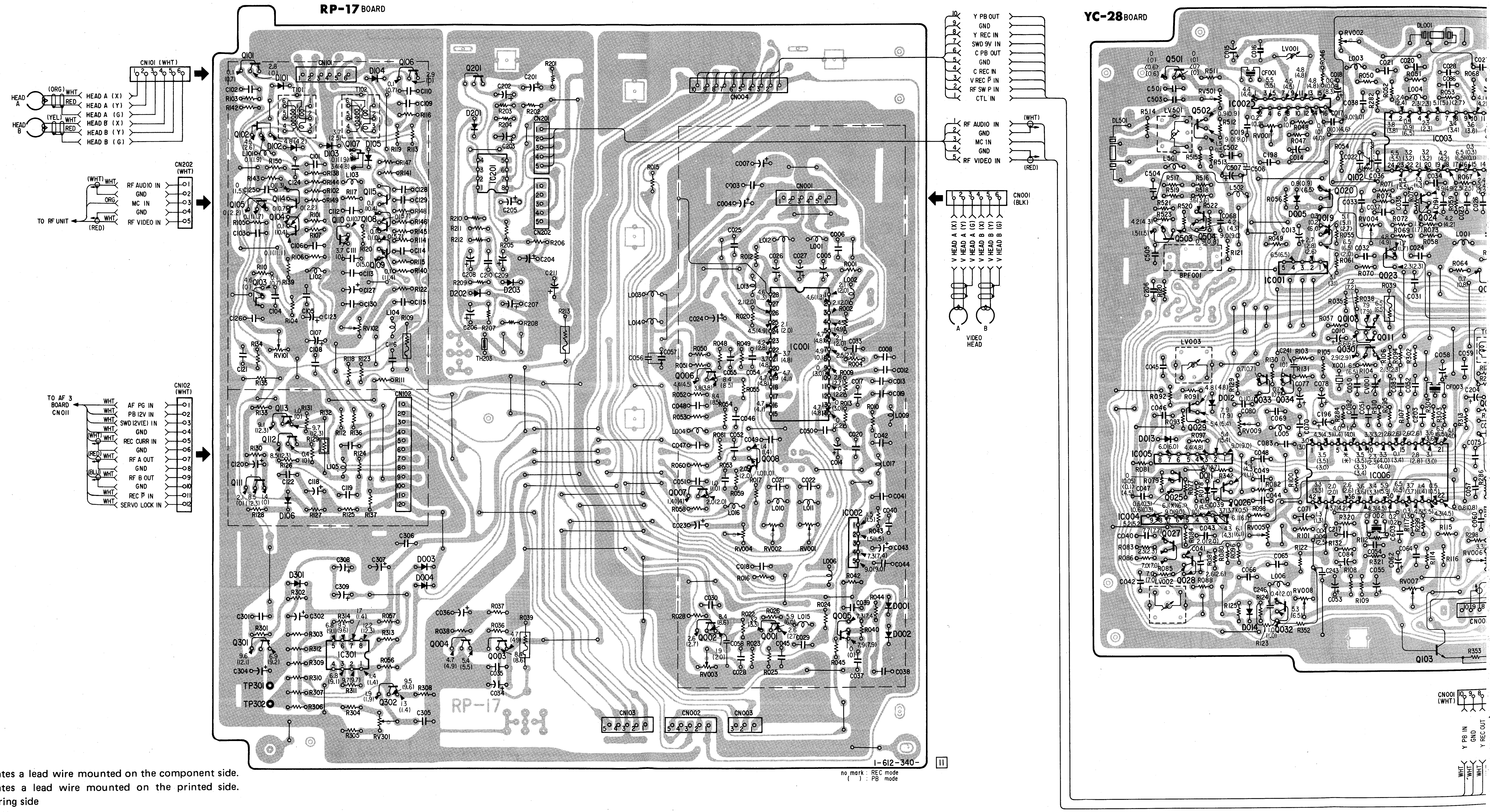
I
J
Q032 2SC2785 AMP
Q071 2SC2785 BUFFER
Q033,034 2SC2785 BUFFER
IC006 CX10021A CHROMA
Q029 2SC2785 AMP
Q028 2SC2785 AMP
Q027 2SA1175 AMP
Q026 2SA1175 SW
D012,011 1SS133
Q025 2SC2785 SW
D009 MC921
IC002 BA7007 SECAM
Q020,019 2SA1175 SW
Q021 2SC2785 SW
Q022 2SC2785 BUFFER
IC001 BA634 FLIP FLOP
D002 1SS133
Q002,004 2SC2785 AMP
Q003,005 2SK108
Q066 2SA1175 SW
Q001 DTC124ES SW
D001 1SS133
Q007 2SC2785 SW
CN010 A/V SELECTOR
AUDIO IN
AUDIO OUT
C001 10/16V
C002 10/16V
IC003 CX10023 PAL JOG
IC004 CX894 SW
IC005 CX20061 SW
D013 1SS133
Q023 2SC2785 EQ
Q024 2SA1175 EQ
Q102 DTA144ES SW
Q101 DTC144ES SW
Q100 DTC144WS SW
Q067 2SC2785 BUFFER
Q010 2SD773 SW
Q011 2SA1175 SW
Q015 2SC2785 SW
Q014 2SB733 DRIVE
Q030 2SC2785 BUFFER
Q031 2SC2785 SW
D006 MC921
D005 1SS133
Q068,016 2SC2785 BUFFER
CN007(BLK)
10 GND —
9 AUDIO R OUT WHT
8 AUDIO L OUT WHT
7 GND —
6 MUTE+V DET IN BLU
5 AUDIO SEL OUT BLU
4 GND —
3 AUDIO L IN WHT
2 AUDIO R IN WHT
1 GND —
(YEL)
(ORG)
(RED)
(WHT)
TO AF-3 BOARD CN003
CN005 (BLK)
1 RF AUDIO OUT WHT
2 GND —
3 MC OUT ORG
4 GND —
5 RF VIDEO OUT WHT
(WHT)
(RED)
CN008 (RED)
7 4.43MHz REF OUT WHT
6 GND —
5 CTL IN WHT
4 COMP SYNC OUT WHT
3 VBP IN WHT
2 RF SW P IN WHT
1 MC IN WHT
(WHT)
TO SS-28 BOARD CN306
ACK
HD
BF
SECAM
C OUT
4.43MHz REF
COMP SYNC
PG
PG
Y/C
MC
CTL
REC P
6.5V
PB 9V
12V
R040 4.7 (1/4W)
PS001 ICP-N20
CN003 (WHT)
1 SWD 12V(E) IN WHT
2 SWD 9V IN WHT
3 GND WHT
TO SW REG BLOCK M BOARD CN002
CN009
CAMERA REMOTE
CN004 (WHT)
1 C RMT IN/OUT WHT
2 AV CONT IN WHT
3 V REC. P IN WHT
4 PB IN WHT
5 AUDIO SEL IN WHT
6 V MUTE IN WHT
7 VIDEO SEL IN WHT
TO SS-28 BOARD CN601
CN006 (WHT)
1 TU VIDEO IN WHT
2 GND —
3 TEST SIG IN ORG
4 TU EE OUT YEL
5 COMP SYNC OUT BLU
(WHT)
TO TU-60 BOARD CN001
VIDEO IN
VIDEO OUT
D023,033 1SS133
IC009(1/2) CX20043 Y I CHIP
D015 1SS133
Q035 2SC403SP SW
D016 MC921
Q036 2SC403SP DARK CLIP
Q037 2SA844 WHITE CLIP
Q038 2SA844 AMP
Q039 2SC403SP THERMAL COMP
D017-020 1SS133
Q040 2SC403SP AMP
Q041 2SA844 BUFFER
Q042-044 2SC403SP AMP
Q045 2SA844 BUFFER
IC009(1/2) CX20043 Y I CHIP
DARK CLIP
WHITE CLIP
CARR SET
DEVIATION
COMPRESS
1/2 FH
SYNC SEP
GATE PULSE
AGC DET
CLAMP
LIM
Y/C SEP
AGC
IC011 CX20061 SW
D025 1SS133
D027 MC921
D029 RD10E-B1
Q401 2SC2785 BUFFER
Q056 2SC403SP EQ
Q055,054 2SA844 EQ
Q053 2SA844 AMP
Q075 DTC144WS SW
Y COMB
DL401 (1H DELAY)
IC401
D022,021 1SS133
PB LEVEL
EXPAND
D030,031 1SS133
VSA
IC012 CX7926 TSG
IC401 CX866A Y COMB
Q052 2SC403SP AMP
Q051 2SA844 AMP
Q050 2SC403SP THERMAL COMP
Q049,048 2SC403SP AMP
Q047 2SC403SP BUFFER
Q074 2SC2785 AMP
Q063 2SC2785 SW
Q060 2SA1175 AMP
Q064 2SC2785 SW
Q062 2SA1175 AMP
Q072 2SC2785 BUFFER
Q061 2SC2785 BUFFER
Q065 2SC2785 BUFFER
Q069 2SA1175 AMP
D036 1SS133
no mark : PAL REC mode
( ) : PAL PB mode
⟨ ⟩ : SECAM REC mode
[ ] : SECAM PB mode

RP-17 (LOW-CONVERTED CHROMA, Y-FM & AFM SIGNALS, RECORD/PLAYBACK AMP), YC-28 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS) PRINTED WIRING BOARDS

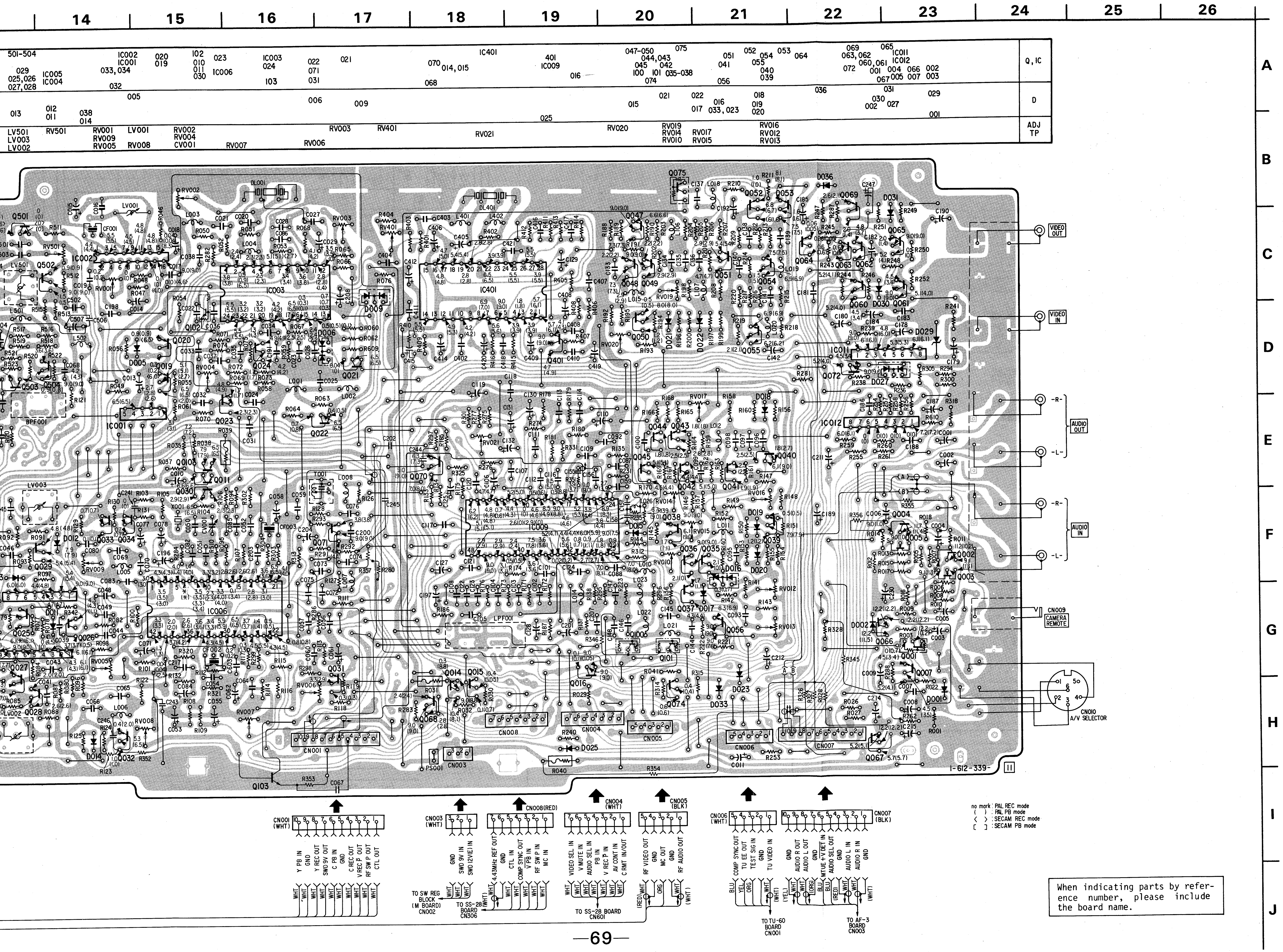
– Ref. No. RP-17 BOARD : 2000 series, YC-28 BOARD : 1000 series –

	4	5	6	7	8	9	10	11	12	13	14	15	16
Q, IC	101 102 105 103 111 301 114 104 113 112	107 110 IC301 115 108 109 302	106 201 IC201 004 003		006 002	001	IC001 IC002 005			501-504 029 025,026 027,028	IC005 IC004 IC002 IC001 033, 034	032 020 019 102 010 011 030 023	IC006 IC003 024 103
D	101 102 106 301	103 104 105	003 004 201 202, 203					001 002		013	012 011 038 014	005	
ADJ TP	RV101 TP301 TP302	RV102 RV301				RV003 RV004 RV002	RV001			LV501 LV003 LV002	RV501 RV001 RV009 RV005	LV001 RV008 RV002 RV004 CV001	RV007


RP-17 BOARD
YC-28 BOARD
CN101 (WHT)
HEAD A
HEAD B
HEAD A (X)
HEAD A (Y)
HEAD A (G)
HEAD B (X)
HEAD B (Y)
HEAD B (G)
CN202 (WHT)
RF AUDIO IN
GND
MC IN
GND
RF VIDEO IN
TO RF UNIT
CN102 (WHT)
TO AF 3 BOARD CN011
AF PG IN
PB 12V IN
SWD 12V(E) IN
GND
REC CURR IN
GND
RF A OUT
GND
RF B OUT
GND
REC P IN
SERVO LOCK IN
Y PB OUT
GND
Y REC IN
SWD 9V IN
C PB OUT
GND
C REC IN
V REC P IN
RF SW P IN
CTL IN
RF AUDIO IN
GND
MC IN
GND
RF VIDEO IN
CN001 (BLK)
V HEAD A (X)
V HEAD A (Y)
V HEAD A (G)
V HEAD B (X)
V HEAD B (Y)
V HEAD B (G)
VIDEO HEAD
TP301
TP302
RP-17
1-612-340-
11
no mark : REC mode
( ) : PB mode
CN001 (WHT)
Y PB IN
GND
Y REC OUT

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern

VIDEO VIDEO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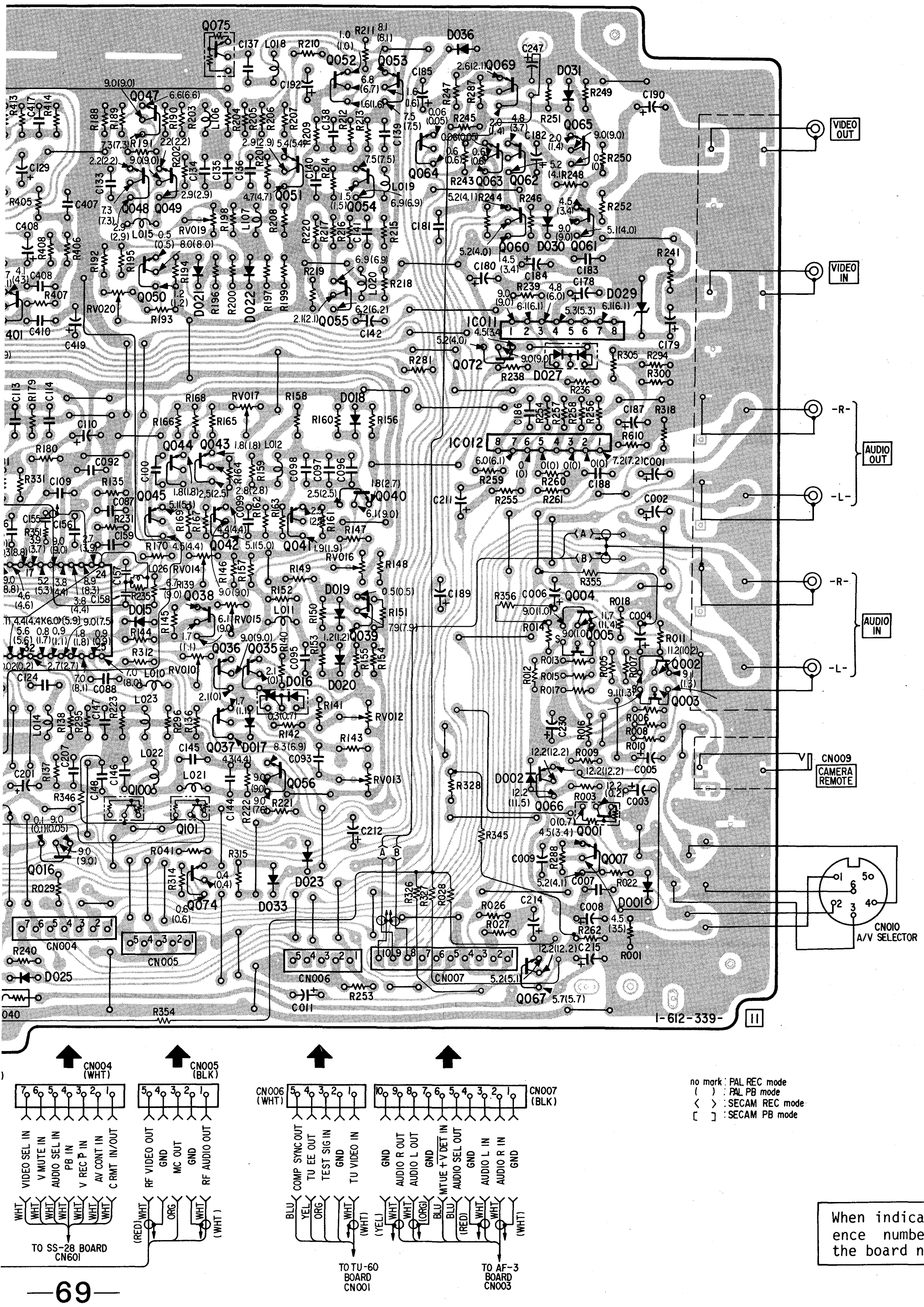
H
I
J
Q, IC
D
ADJ TP
VIDEO OUT
VIDEO IN
-R-
-L-
AUDIO OUT
AUDIO IN
CN009 CAMERA REMOTE
CN010 A/V SELECTOR
1-612-339- 11
CN001 (WHT)
Y PB IN
GND
Y REC OUT
SWD 9V OUT
C PB IN
GND
C REC OUT
V REC P OUT
RF SW P OUT
CTL OUT
CN003 (WHT)
GND
SWD 9V IN
SWD 12V(E) IN
TO SW REG BLOCK (M BOARD) CN002
CN008(RED)
4.43MHz REF OUT
GND
CTL IN
COMP SYNC OUT
V PB IN
RF SW P IN
MC IN
TO SS-28 BOARD CN306
CN004 (WHT)
VIDEO SEL IN
V MUTE IN
AUDIO SEL IN
PB IN
V REC P IN
AV CONT IN
C RMT IN/OUT
TO SS-28 BOARD CN601
CN005 (BLK)
RF VIDEO OUT
GND
MC OUT
GND
RF AUDIO OUT
CN006 (WHT)
COMP SYNC OUT
TU EE OUT
TEST SIG IN
GND
TU VIDEO IN
TO TU-60 BOARD CN001
CN007 (BLK)
GND
AUDIO R OUT
AUDIO L OUT
GND
MTUE + V DET IN
AUDIO SEL OUT
GND
AUDIO L IN
AUDIO R IN
GND
TO AF-3 BOARD CN003
WHT
BLU
YEL
ORG
RED

no mark : PAL REC mode
( ) : PAL PB mode
< > : SECAM REC mode
[ ] : SECAM PB mode

When indicating parts by reference number, please include the board name.

VIDEO VIDEO

9	20	21	22	23	
01 009 016	047-050 075 044,043 045 042 100 101 035-038 074	051 052 054 053 041 055 040 039 056	064 069 063,062 060,061 072 001	065 IC011 IC012 004 005 066 007 002 003 067	Q, IC
5	015 021	022 017 016 033,023 018 019 020	036 030 002	031 027 029 001	D
	RV020 RV019 RV014 RV010	RV017 RV015 RV016 RV012 RV013			ADJ TP


VIDEO OUT
VIDEO IN
-R-
-L-
AUDIO OUT
-R-
-L-
AUDIO IN
CN009
CAMERA REMOTE
CN010
A/V SELECTOR
IC011
IC012
1-612-339-
11
CN004
CN005
CN006
CN007
CN004 (WHT)
CN005 (BLK)
CN006 (WHT)
CN007 (BLK)
VIDEO SEL IN
V MUTE IN
AUDIO SEL IN
PB IN
V REC P IN
AV CONT IN
C RMT IN/OUT
RF VIDEO OUT
GND
MC OUT
GND
RF AUDIO OUT
COMP SYNC OUT
TU EE OUT
TEST SIG IN
GND
TU VIDEO IN
GND
AUDIO R OUT
AUDIO L OUT
GND
MTUE + V DET IN
AUDIO SEL OUT
GND
AUDIO L IN
AUDIO R IN
GND
WHT
WHT
WHT
WHT
WHT
WHT
WHT
(RED)
WHT
ORG
WHT
(WHT)
BLU
YEL
ORG
WHT
(WHT)
(YEL)
WHT
WHT
(ORG)
BLU
BLU
(RED)
WHT
WHT
(WHT)
TO SS-28 BOARD CN601
TO TU-60 BOARD CN001
TO AF-3 BOARD CN003

no mark : PAL REC mode
( ) : PAL PB mode
〈 〉 : SECAM REC mode
[ ] : SECAM PB mode

When indicating parts by reference number, please include the board name.

A
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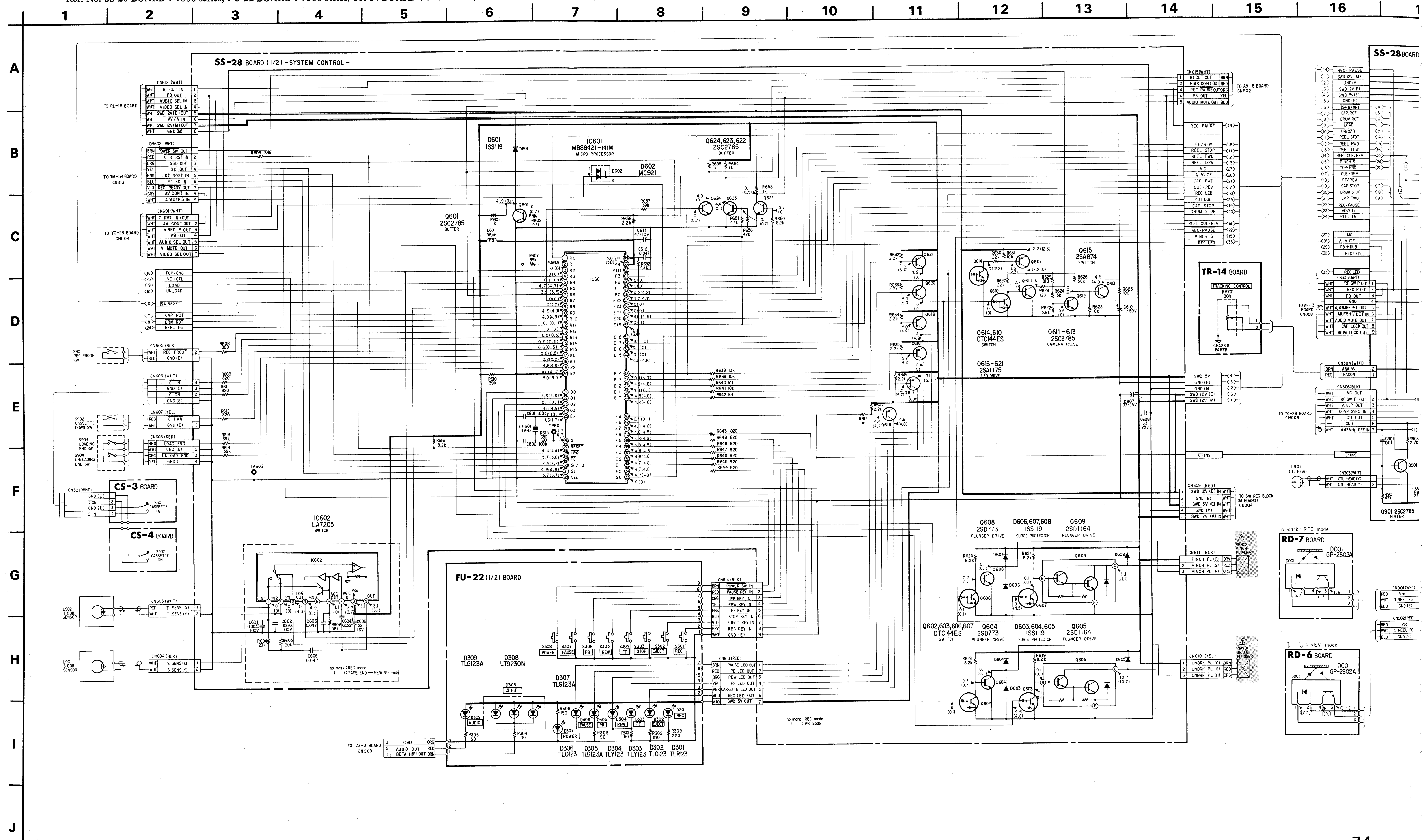
4-3. SS-28 (SERVO/SYSTEM CONTROL), FU-22 (FUNCTION SWITCH & IND), TR-14 (TRACKING CONTROL), RD-6 (ROTATION DETECTOR), RD-7 (ROTATION DETECTOR), LM-8 (NOISE FILTER), CS-3 (CASSETTE ON SWITCH), CS-4 (CASSETTE IN SWIT

– Ref. No. SS-28 BOARD : 4000 series, FU-22 BOARD : 7300 series, TR-14 BOARD : 5700 series, RD-6 BOARD : 6700 series, RD-7 BOARD : 6800 series, LM-8 BOARD : 7100 series, CS-3, CS-4 BOARD : 6300 series, PT-7 BOARD : 7700 series, REEL MOTOR BOARD : 7500 series –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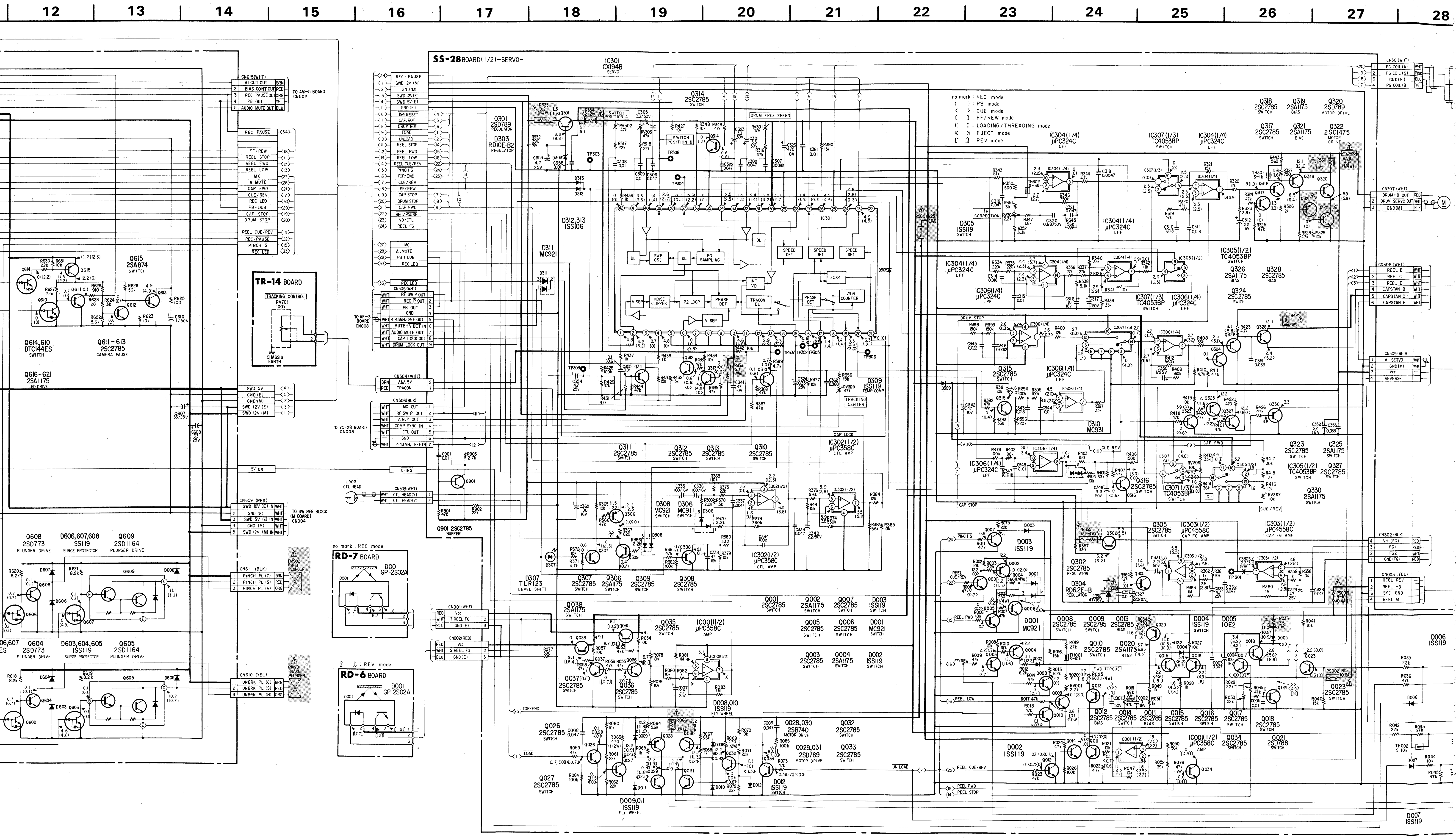
SS-28 BOARD (1/2) -SYSTEM CONTROL-
CN612 (WHT)
HI CUT IN
PB OUT
AUDIO SEL IN
VIDEO SEL IN
SWD 12V(E) OUT
AV/Ā IN
SWD 12V(M) OUT
GND (M)
TO RL-18 BOARD
CN602 (WHT)
POWER SW OUT
CTR RST IN
SSD OUT
SC OUT
RT RQST IN
RT SD IN
REC READY OUT
AV CONT IN
A MUTE 3 IN
TO TM-54 BOARD CN103
CN601 (WHT)
C RMT IN/OUT
AV CONT OUT
V REC P OUT
PB OUT
AUDIO SEL OUT
V MUTE OUT
VIDEO SEL OUT
TO YC-28 BOARD CN004
TOP/END
VD/CTL
LOAD
UNLOAD
194 RESET
CAP ROT
DRM ROT
REEL FG
CN605 (BLK)
REC PROOF
S901 REC PROOF SW
CN606 (WHT)
C IN
C ON
CN607 (YEL)
C. DWN.
S902 CASSETTE DOWN SW
CN608 (RED)
LOAD END
UNLOAD END
S903 LOADING END SW
S904 UNLOADING END SW
CS-3 BOARD
CN301 (WHT)
S301 CASSETTE IN
CS-4 BOARD
S302 CASSETTE ON
TP602
IC602 LA7205 SWITCH
L902 T COIL SENSOR
CN603 (WHT)
T SENS (X)
T SENS (Y)
L901 S COIL SENSOR
CN604 (BLK)
S SENS (X)
S SENS (Y)
no mark : REC mode
( ) : TAPE END → REWIND mode
D601 1SS119
IC601 MB88421-141M MICRO PROCESSOR
D602 MC921
Q601 2SC2785 BUFFER
Q624,623,622 2SC2785 BUFFER
CF601 4MHz
TP601
FU-22 (1/2) BOARD
CN614 (BLK)
POWER SW IN
PAUSE KEY IN
PB KEY IN
REW KEY IN
FF KEY IN
STOP KEY IN
EJECT KEY IN
REC KEY IN
CN613 (RED)
PAUSE LED OUT
PB LED OUT
REW LED OUT
FF LED OUT
CASSETTE LED OUT
REC LED OUT
SWD 5V OUT
S308 POWER
S307 PAUSE
S306 PB
S305 REW
S304 FF
S303 STOP
S302 EJECT
S301 REC
D309 TLG123A
D308 LT9230N
D308 β HIFI
D307 TLG123A
D306 TL0123
D305 TLG123A
D304 TLY123
D303 TLY123
D302 TL0123
D301 TLR123
TO AF-3 BOARD CN309
GND
AUDIO OUT
BETA HIFI OUT
Q615 2SA874 SWITCH
Q614,610 DTC144ES SWITCH
Q611-613 2SC2785 CAMERA PAUSE
Q616-621 2SA1175 LED DRIVE
CN615 (WHT)
HI CUT OUT
BIAS CONT OUT
REC PAUSE OUT
PB OUT
AUDIO MUTE OUT
TO AM-5 BOARD CN502
REC PAUSE
FF/REW
REEL STOP
REEL FWD
REEL LOW
M C
A MUTE
CAP FWD
CUE/REV
REC LED
PB+DUB
CAP STOP
DRUM STOP
REEL CUE/REV
REC-PAUSE
PINCH S
TR-14 BOARD
TRACKING CONTROL
RV701 100k
CHASSIS EARTH
SWD 5V
GND (E)
GND (M)
SWD 12V (E)
SWD 12V (M)
C-INS
CN609 (RED)
SWD 12V (E) IN
SWD 5V (E) IN
GND (M)
SWD 12V (M) IN
TO SW REG BLOCK (M BOARD) CN004
Q608 2SD773 PLUNGER DRIVE
D606,607,608 1SS119 SURGE PROTECTOR
Q609 2SD1164 PLUNGER DRIVE
CN611 (BLK)
PINCH PL (C)
PINCH PL (S)
PINCH PL (H)
PM902 PINCH PLUNGER
Q602,603,606,607 DTC144ES SWITCH
Q604 2SD773 PLUNGER DRIVE
D603,604,605 1SS119 SURGE PROTECTOR
Q605 2SD1164 PLUNGER DRIVE
CN610 (YEL)
UNBRK PL (C)
UNBRK PL (S)
UNBRK PL (H)
PM901 BRAKE PLUNGER
no mark : REC mode
( ) : PB mode
SS-28 BOARD
RECꞏPAUSE
SWD 12V (M)
GND (M)
SWD 12V (E)
SWD 5V (E)
GND (E)
194 RESET
CAP. ROT
DRUM ROT
LOAD
UNLOAD
REEL STOP
REEL FWD
REEL LOW
REEL CUE/REV
PINCH S
TOP/END
CUE/REV
FF/REW
CAP STOP
DRUM STOP
CAP FWD
REC/PAUSE
VD/CTL
REEL FG
MC
A.MUTE
PB+DUB
REC LED
CN305 (WHT)
RF SW P OUT
REC P OUT
PB OUT
GND
4.43MHz REF OUT
MUTE+V DET IN
AUDIO MUTE OUT
CAP LOCK OUT
DRUM LOCK OUT
TO AF-3 BOARD CN008
CN304 (WHT)
ANA 5V
TRACON
CN306 (BLK)
MC OUT
RF SW P OUT
V.B.P OUT
COMP SYNC IN
CTL OUT
4.43MHz REF IN
TO YC-28 BOARD CN008
L903 CTL HEAD
CN303 (WHT)
CTL HEAD (X)
CTL HEAD (Y)
Q901 2SC2785 BUFFER
no mark : REC mode
RD-7 BOARD
D001 GP-2S02A
CN001 (WHT)
Vcc
T REEL FG
GND (E)
[ ] : REV mode
RD-6 BOARD
D001 GP-2S02A
CN002 (RED)
Vcc
S REEL FG
GND (E)

OR), LM-8 (NOISE FILTER), CS-3 (CASSETTE ON SWITCH), CS-4 (CASSETTE IN SWITCH), PT-7 (REEL & CAPSTAN MOTOR DRIVE), CAPSTAN MOTOR, REEL MOTOR SCHEMATIC DIAGRAM

0 series, PT-7 BOARD : 7700 series, REEL MOTOR BOARD : 7500 series –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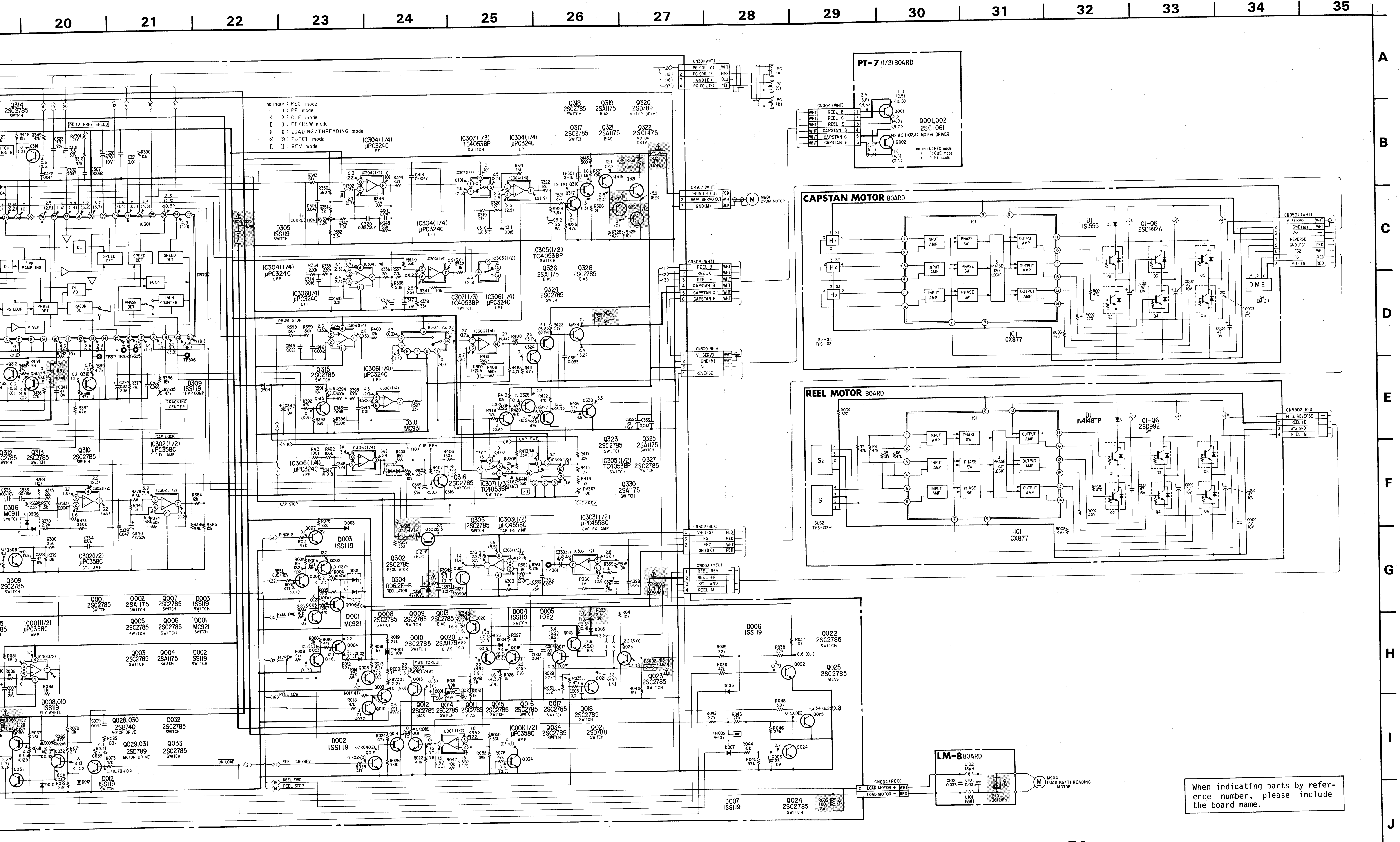
SS-28 BOARD (1/2) -SERVO-
IC301 CX194B SERVO
TR-14 BOARD
TRACKING CONTROL RV701 100k
RD-7 BOARD
D001 GP-2S02A
RD-6 BOARD
no mark : REC mode
( ) : PB mode
〈 〉 : CUE mode
[ ] : FF/REW mode
(( )) : LOADING/THREADING mode
《 》 : EJECT mode
[[ ]] : REV mode
TO AM-5 BOARD CN502
TO AF-3 BOARD CN008
TO YC-28 BOARD CN008
TO SW REG BLOCK (M BOARD) CN004
CN615 (WHT)
CN305 (WHT)
CN304 (WHT)
CN306 (BLK)
CN303 (WHT)
CN609 (RED)
CN611 (BLK)
CN610 (YEL)
CN001 (WHT)
CN002 (RED)
CN301 (WHT)
CN307 (WHT)
CN308 (WHT)
CN309 (RED)
CN302 (BLK)
CN003 (YEL)
PM902 PINCH PLUNGER
PM901 BRAKE PLUNGER
Q301 2SD789 REGULATOR
D303 RD10E-B2 REGULATOR
Q901 2SC2785 BUFFER
IC302 (1/2) μPC358C CTL AMP
IC304 (1/4) μPC324C LPF
IC306 (1/4) μPC324C LPF
IC307 (1/3) TC4053BP SWITCH
IC305 (1/2) TC4053BP SWITCH
IC303 (1/2) μPC4558C CAP FG AMP
IC001 (1/2) μPC358C AMP
Q028,030 2SB740 MOTOR DRIVE
Q029,031 2SD789 MOTOR DRIVE
Q320 2SD789 MOTOR DRIVE
Q322 2SC1475 MOTOR DRIVE
L903 CTL HEAD

OR DRIVE), CAPSTAN MOTOR, REEL MOTOR SCHEMATIC DIAGRAM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A
B
C
D
E
F
G
H
I
J
no mark : REC mode
( ) : PB mode
< > : CUE mode
[ ] : FF/REW mode
(( )) : LOADING/THREADING mode
« » : EJECT mode
[[ ]] : REV mode
Q314 2SC2785 SWITCH
DRUM FREE SPEED
IC301
PG SAMPLING
SPEED DET
FCX4
INT VD
PHASE DET
1/4 N COUNTER
P2 LOOP
TRACON DL
V SEP
TRACKING CENTER
D309 ISS119 TEMP COMP
CAP LOCK
IC302(1/2) μPC358C CTL AMP
Q312 2SC2785 SWITCH
Q313 2SC2785 SWITCH
Q310 2SC2785 SWITCH
D306 MC911 SWITCH
Q308 2SC2785 SWITCH
PS001 N25 (0.4A)
D305 ISS119 SWITCH
FH CORRECTION
IC304(1/4) μPC324C LPF
IC307(1/3) TC4053BP SWITCH
IC305(1/2) TC4053BP SWITCH
IC306(1/4) μPC324C LPF
Q318 2SC2785 SWITCH
Q319 2SA1175 BIAS
Q320 2SD789 MOTOR DRIVE
Q317 2SC2785 SWITCH
Q321 2SA1175 BIAS
Q322 2SC1475 MOTOR DRIVE
TH301 S-1k
Q326 2SA1175 BIAS
Q328 2SC2785 BIAS
Q324 2SC2785 SWITCH
DRUM STOP
Q315 2SC2785 SWITCH
D310 MC931
Q323 2SC2785 SWITCH
Q325 2SA1175 SWITCH
Q327 2SC2785 SWITCH
Q330 2SA1175 SWITCH
CUE REV
CAP FWD
CUE/REV
CAP STOP
Q316 2SC2785 SWITCH
Q305 2SC2785 SWITCH
IC303(1/2) μPC4558C CAP FG AMP
Q302 2SC2785 REGULATOR
D304 RD6.2E-B REGULATOR
TP301
PINCH S
D003 ISS119
REEL CUE/REV
REEL FWD
FF/REW
REEL LOW
UN LOAD
REEL CUE/REV
REEL FWD
REEL STOP
Q001 2SC2785 SWITCH
Q002 2SA1175 SWITCH
Q007 2SC2785 SWITCH
D003 ISS119 SWITCH
IC001(1/2) μPC358C AMP
Q005 2SC2785 SWITCH
Q006 2SC2785 SWITCH
D001 MC921 SWITCH
Q003 2SC2785 SWITCH
Q004 2SA1175 SWITCH
D002 ISS119 SWITCH
D008,010 ISS119 FLY WHEEL
Q028,030 2SB740 MOTOR DRIVE
Q032 2SC2785 SWITCH
Q029,031 2SD789 MOTOR DRIVE
Q033 2SC2785 SWITCH
D012 ISS119 SWITCH
D001 MC921
Q008 2SC2785 SWITCH
Q009 2SC2785 SWITCH
Q013 2SC2785 BIAS
D004 ISS119 SWITCH
D005 IOE2
Q010 2SC2785 SWITCH
Q020 2SA1175 BIAS
FWD TORQUE
THQ01 S-10k
Q012 2SC2785 BIAS
Q014 2SC2785 SWITCH
Q011 2SC2785 BIAS
Q015 2SC2785 SWITCH
Q016 2SC2785 SWITCH
Q017 2SC2785 SWITCH
Q018 2SC2785 SWITCH
D002 ISS119
IC001(1/2) μPC358C AMP
Q034 2SC2785 SWITCH
Q021 2SD788 SWITCH
Q023 2SC2785 SWITCH
PS002 N15 (0.6A)
PS003 N10 (0.4A)
D006 ISS119
Q022 2SC2785 SWITCH
Q025 2SC2785 BIAS
TH002 S-10k
D007
Q024
D007 ISS119
Q024 2SC2785 SWITCH
R086 100 (2W)
CN301(WHT)
PG COIL(A)
PG COIL(S)
GND(E)
PG COIL(B)
PG (A)
PG (S)
PG (B)
CN307 (WHT)
DRUM +B OUT
DRUM SERVO OUT
GND(M)
M901 DRUM MOTOR
CN308 (WHT)
REEL B
REEL C
REEL E
CAPSTAN B
CAPSTAN C
CAPSTAN E
CN309 (RED)
V SERVO
GND(M)
Vcc
REVERSE
CN302 (BLK)
V+(FG)
FG1
FG2
GND(FG)
CN003 (YEL)
REEL REV
REEL +B
SYC GND
REEL M
PT-7 (1/2) BOARD
CN004 (WHT)
REEL B
REEL C
REEL E
CAPSTAN B
CAPSTAN C
CAPSTAN E
Q001
Q002
Q001,002 2SC1061 MOTOR DRIVER
no mark : REC mode
( ) : CUE mode
< > : FF mode
CAPSTAN MOTOR BOARD
S1
S2
S3
Hx
IC1
INPUT AMP
PHASE SW
3 PHASE 120° LOGIC
OUTPUT AMP
D1 1S1555
Q1-Q6 2SD992A
CN9501 (WHT)
V SERVO
GND(M)
Vcc
REVERSE
GND(FG)
FG2
FG1
V+(FG)
DME
S4 DM-211
C003 47 10V
C004 47 10V
R002 470
R003 470
IC1 CX877
S1~S3 THS-103
REEL MOTOR BOARD
R004 820
D1 1N4148TP
Q1-Q6 2SD992 SW
CN9502 (RED)
REEL REVERSE
REEL +B
SYS GND
REEL M
S2
S1
S1,S2 THS-103-1
IC1 CX877
CN004 (RED)
LOAD MOTOR +
LOAD MOTOR −
LM-8 BOARD
L102 18μH
C102 0.033
C101 0.033
L101 18μH
R101 10(1/2W)
M904 LOADING/THREADING MOTOR

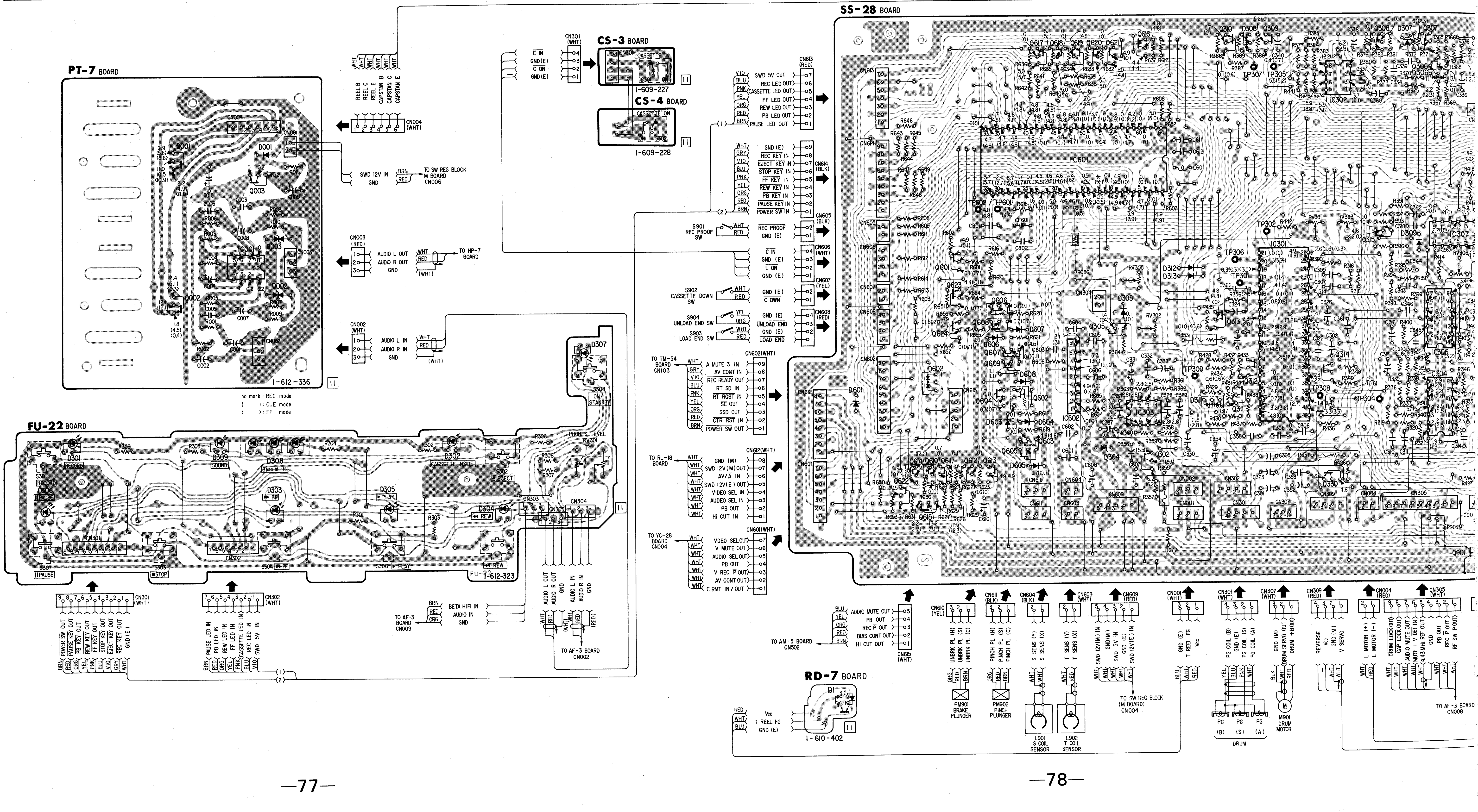
When indicating parts by reference number, please include the board name.

SERVO, SYSTEM CONTROL SERVO, SYSTEM CONTROL

SS-28 (SERVO/SYSTEM CONTROL), FU-22 (FUNCTION SWITCH & IND), TR-14 (TRACKING CONTROL), RD-6 (ROTATION DETECTOR), RD-7 (ROTATION DETECTOR), LM-8 (NOISE FILTER), CS-3 (CASSETTE ON SWITCH), CS-4 (CASSETTE IN SWITCH),

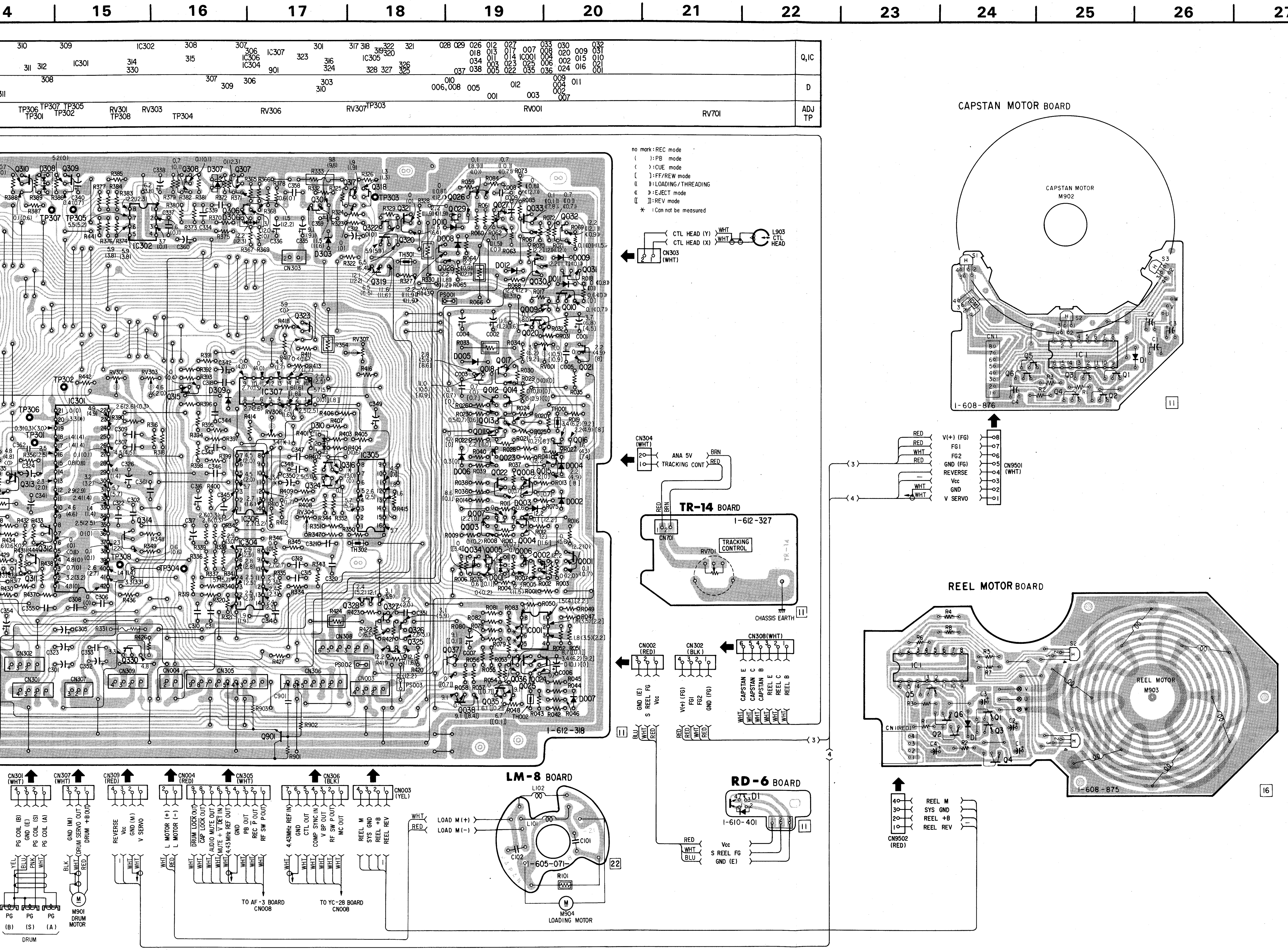
– Ref. No. SS-28 BOARD : 4000 series, FU-22 BOARD : 7300 series, TR-14 BOARD : 5700 series, RD-6 BOARD : 6700 series, RD-7 BOARD : 6800 series, LM-8 BOARD : 7100 series, CS-3, CS-4 BOARD : 6300 series, PT-7 BOARD : 7700 series, REEL MOTOR BOARD : 7500 series –

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	1
Q, IC			001 002	003 IC001							622 614 615 610 611 601 623 624 612	613 604 606 608 607 609 602 603 605 617 618 IC602	619 IC601 620 621 305 616 IC303 302	313 310 311 312	309 IC301 314 330 IC302	308 315 307	306 IC306 IC304 IC307 901
D	306 301		309	001 308 303 003 002	305	302 304	307			601	602	606 603 607 608 604 605	304 305	312 313 311 308		307 309	306
ADJ TP							RV301				TP602	TP601	RV305 RV302	TP309 TP306 TP301 TP307	TP305 TP302 RV301 TP308	RV303 TP304	RV306


PT-7 BOARD
CS-3 BOARD
CS-4 BOARD
FU-22 BOARD
SS-28 BOARD
RD-7 BOARD
IC601
IC301
IC303
1-612-336
1-609-227
1-609-228
1-612-323
1-610-402
no mark : REC mode
( ) : CUE mode
⟨ ⟩ : FF mode
TO SW REG BLOCK M BOARD CN006
TO HP-7 BOARD
TO TM-54 BOARD CN103
TO RL-18 BOARD
TO YC-28 BOARD CN004
TO AF-3 BOARD CN009
TO AF-3 BOARD CN002
TO AM-5 BOARD CN502
TO SW REG BLOCK (M BOARD) CN004
TO AF-3 BOARD CN008
PM901 BRAKE PLUNGER
PM902 PINCH PLUNGER
L901 S COIL SENSOR
L902 T COIL SENSOR
M901 DRUM MOTOR
DRUM

E ON SWITCH), CS-4 (CASSETTE IN SWITCH), PT-7 (REEL & CAPSTAN MOTOR DRIVE), CAPSTAN MOTOR, REEL MOTOR PRINTED WIRING BOARDS

RD : 7500 series –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27
Q,IC
D
ADJ TP
CAPSTAN MOTOR BOARD
CAPSTAN MOTOR M902
1-608-876
TR-14 BOARD
1-612-327
TRACKING CONTROL
CHASSIS EARTH
REEL MOTOR BOARD
REEL MOTOR M903
1-608-875
LM-8 BOARD
1-605-071
M904 LOADING MOTOR
RD-6 BOARD
1-610-401
1-612-318
CTL HEAD (Y)
CTL HEAD (X)
CN303 (WHT)
L903 CTL HEAD
CN304 (WHT)
ANA 5V
TRACKING CONT
CN9501 (WHT)
V(+) (FG)
FG1
FG2
GND (FG)
REVERSE
Vcc
GND
V SERVO
CN9502 (RED)
REEL M
SYS GND
REEL +B
REEL REV
CN002 (RED)
CN302 (BLK)
CN308 (WHT)
CAPSTAN E
CAPSTAN C
CAPSTAN B
REEL E
REEL C
REEL B
CN301 (WHT)
CN307 (WHT)
CN309 (RED)
CN004 (RED)
CN305 (WHT)
CN306 (BLK)
CN003 (YEL)
LOAD M(+)
LOAD M(-)
Vcc
S REEL FG
GND (E)
TO AF-3 BOARD CN008
TO YC-28 BOARD CN008
M901 DRUM MOTOR
PG (B)
PG (S)
PG (A)
DRUM
no mark : REC mode
( ) : PB mode
< > : CUE mode
[ ] : FF/REW mode
《 》 : LOADING/THREADING
« » : EJECT mode
〖 〗 : REV mode
* : Can not be measured

28 29 30

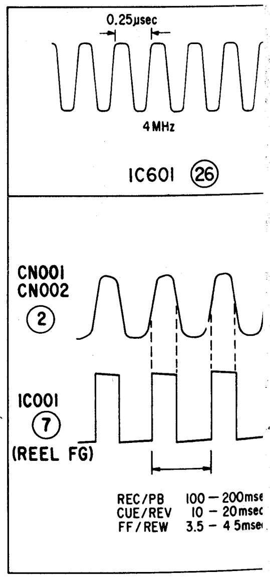
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in µF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capac
- All variable and semi-fixed resistors have characteristic cur unless otherwise noted.
- : Nonflammable resistor
- : Fusible resistor
- ▬ : B + bus.
- The voltage value is a reference value between the groun when the color bar signal is received from a color bar gener
- The voltage value is measured using a digital tester (10M

Note: The components identified by shading and mar ⚠ are critical for safety. Replace only wit part number specified.

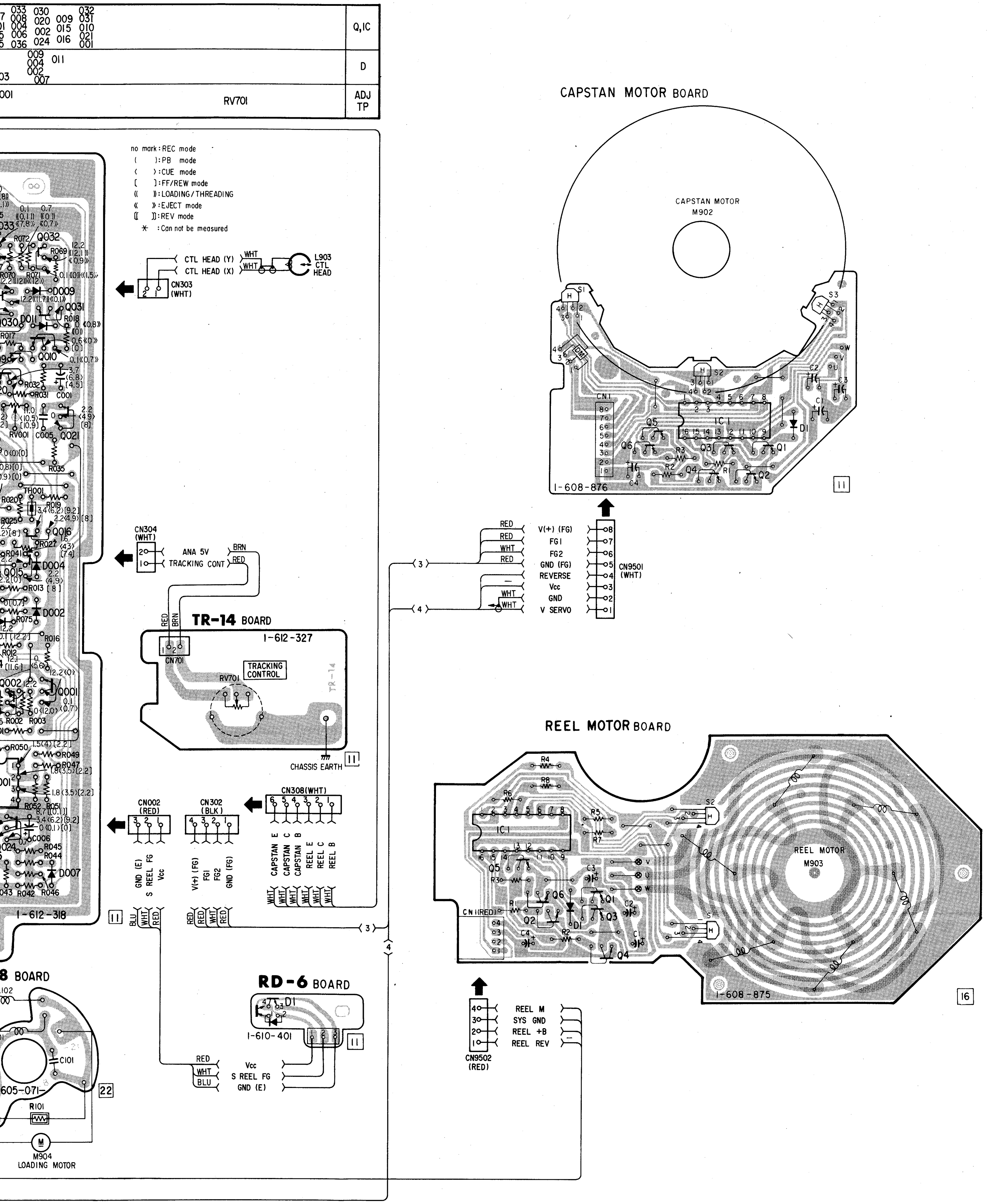
When indicating parts by reference number, please include the board name.

- ○— : indicates a lead wire mounted on the component sid
- ●— : indicates a lead wire mounted on the printed sid
- ▨ : soldering side
- ▨ : component side
- ▨ : B+ pattern

SS-28 (SYSTEM CONTROL) BO



IVE), CAPSTAN MOTOR, REEL MOTOR PRINTED WIRING BOARDS



Q,IC
D
ADJ TP
RV701
no mark : REC mode
( ) : PB mode
〈 〉 : CUE mode
[ ] : FF/REW mode
《 》 : LOADING/THREADING
《 》 : EJECT mode
【 】 : REV mode
* : Can not be measured
CTL HEAD (Y)
CTL HEAD (X)
WHT
L903 CTL HEAD
CN303 (WHT)
CN304 (WHT)
ANA 5V
TRACKING CONT
BRN
RED
TR-14 BOARD
1-612-327
CN701
TRACKING CONTROL
RV701
TR-14
CHASSIS EARTH
11
CN002 (RED)
CN302 (BLK)
CN308 (WHT)
GND (E)
S REEL FG
Vcc
V(+) (FG)
FG1
FG2
GND (FG)
CAPSTAN E
CAPSTAN C
CAPSTAN B
REEL E
REEL C
REEL B
1-612-318
8 BOARD
RD-6 BOARD
1-610-401
C101
R101
605-071
22
M904 LOADING MOTOR
RED
WHT
BLU
Vcc
S REEL FG
GND (E)
CAPSTAN MOTOR BOARD
CAPSTAN MOTOR M902
1-608-876
11
V(+) (FG)
FG1
FG2
GND (FG)
REVERSE
Vcc
GND
V SERVO
CN9501 (WHT)
REEL MOTOR BOARD
REEL MOTOR M903
1-608-875
16
CN1 (RED)
REEL M
SYS GND
REEL +B
REEL REV
CN9502 (RED)

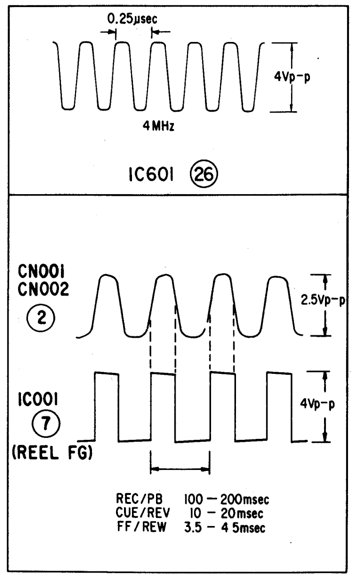
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ▭ : Fusible resistor
- ─── : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

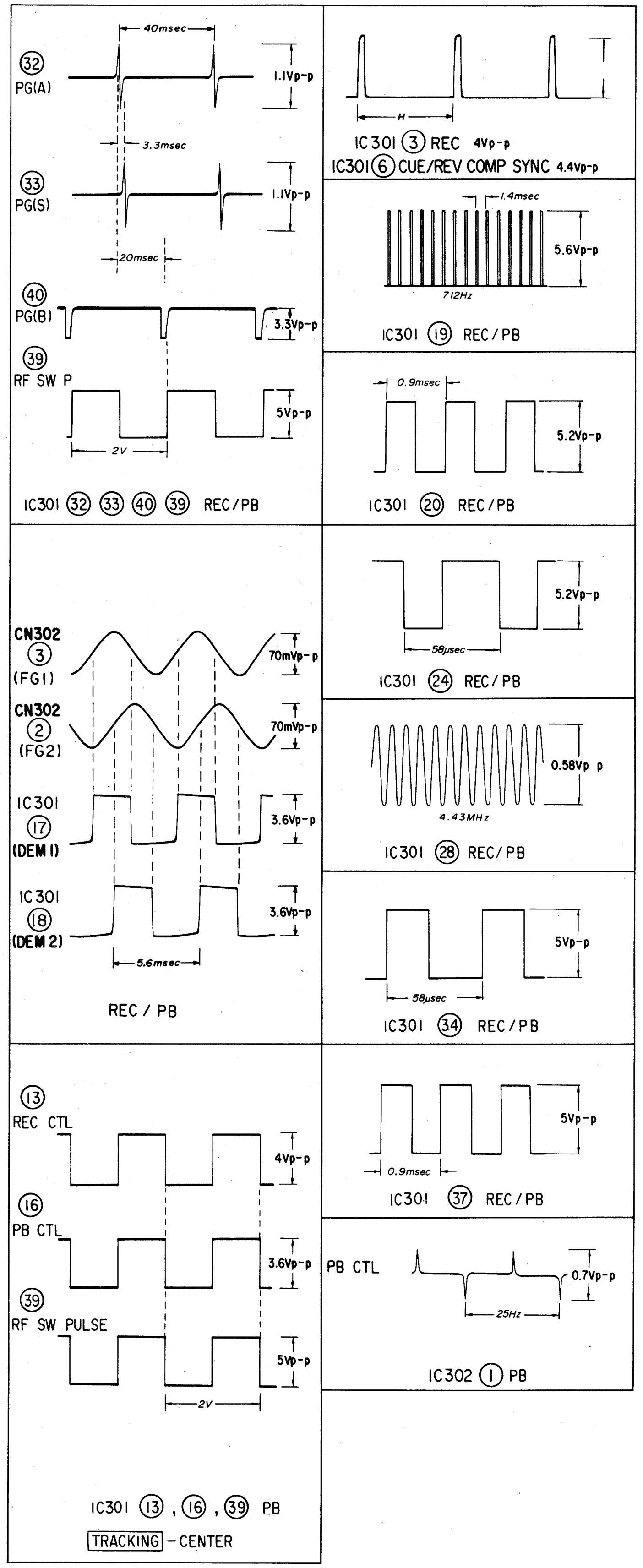
When indicating parts by reference number, please include the board name.

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : component side
- ▨ : B+ pattern

SS-28 (SYSTEM CONTROL) BOARD

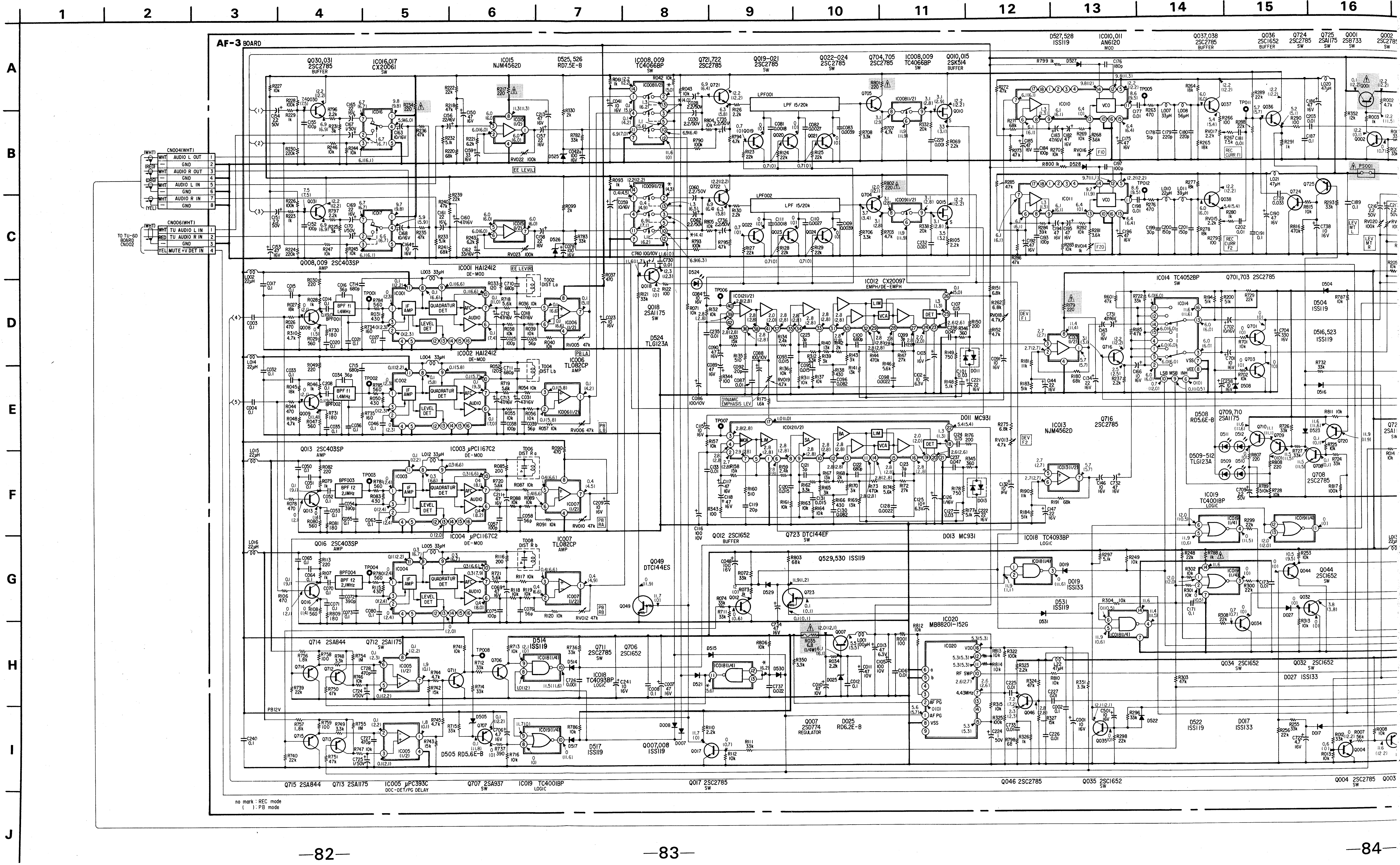


SS-28 (SERVO) BOARD



4-4. AF-3 (AFM SIGNAL RECORD/PLAYBACK PROCESS), AM-5 (AUDIO SIGNAL REC/PB PROCESS), RL-18 (LEVEL METER DRIVE), FU-22 (HEADPHONE LEVEL), PT-7 (HEADPHONE AMP), HP-7 (HEADPHONE JACK), SW-31 (FUNCTION SWITCH), S

– Ref. No. AF-3 BOARD : 3000 series, AM-5 BOARD : 2500 series, RL-18 BOARD : 5800 series, FU-22 BOARD : 7300 series, PT-7 BOARD : 7700 series, HP-7 BOARD : 5400 series, SW-31 BOARD : 6600 series, SV-12 BOARD : 6500 series –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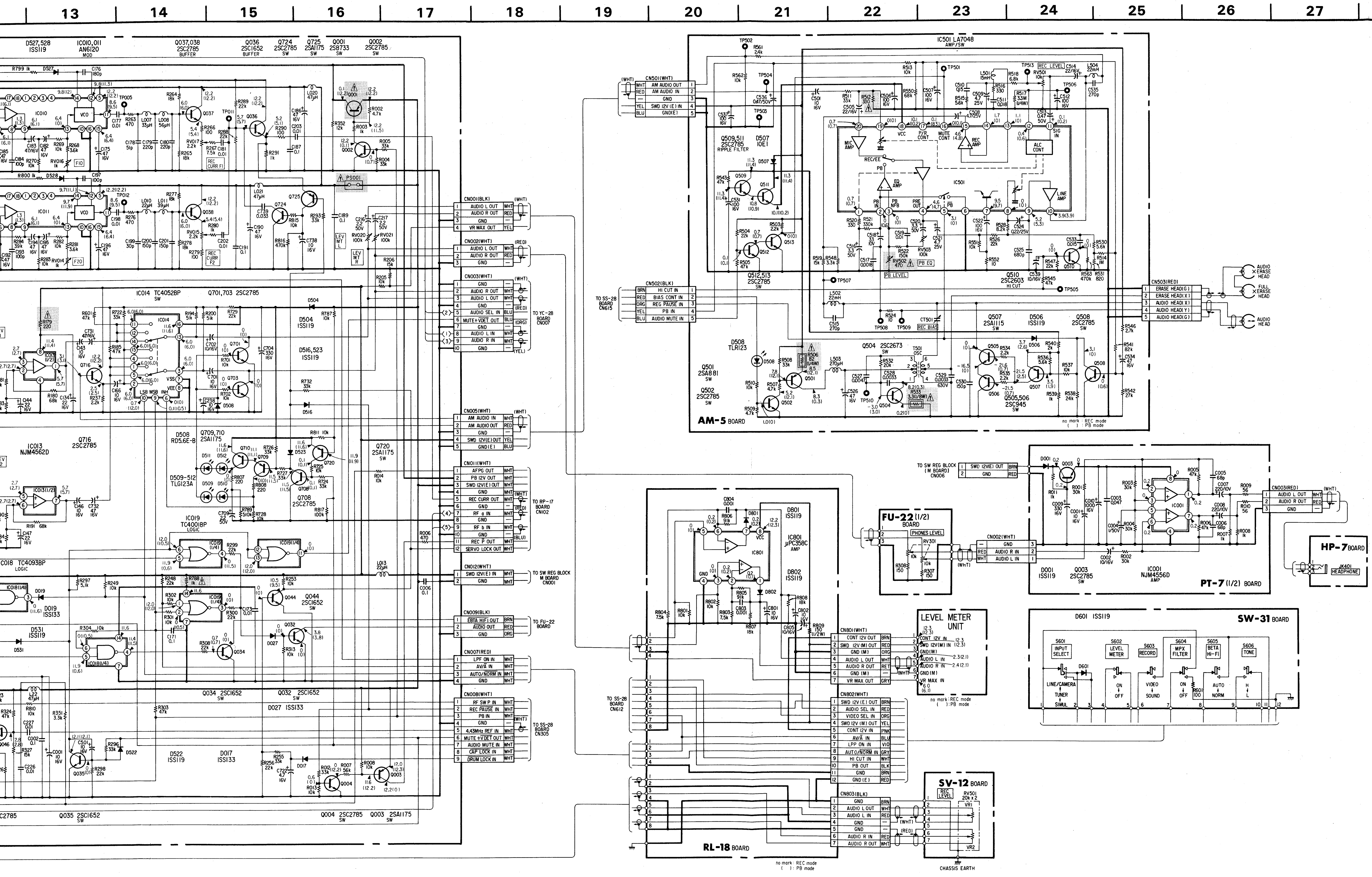
H
I
J
AF-3 BOARD
Q030,031 2SC2785 BUFFER
IC016,017 CX20061 SW
IC015 NJM4562D
D525, 526 RD7.5E-B
IC008,009 TC4066BP SW
Q721,722 2SC2785
Q019–021 2SC2785 SW
Q022–024 2SC2785 SW
Q704,705 2SC2785
IC008,009 TC4066BP SW
Q010,015 2SK514 BUFFER
D527,528 ISS119
IC010,011 AN6120 MOD
Q037,038 2SC2785 BUFFER
Q036 2SC1652 BUFFER
Q724 2SC2785 SW
Q725 2SA1175 SW
Q001 2SB733 SW
Q002 2SC2785
CN004(WHT)
AUDIO L OUT
GND
AUDIO R OUT
GND
AUDIO L IN
GND
AUDIO R IN
GND
CN006(WHT)
TU AUDIO L IN
TU AUDIO R IN
MUTE+V DET IN
TO TU-60 BOARD CN002
LPF001 LPF 15/20k
LPF002 LPF 15/20k
VCO
EE LEVEL
EE LEVEL
PS001
Q008,009 2SC403SP AMP
IC001 HA12412 DE-MOD
T002 DIST Lo
IC002 HA12412 DE-MOD
T004 DIST Lb
IC006 TL082CP AMP
Q018 2SA1175 SW
D524 TLG123A
IC012 CX20097 EMPH/DE-EMPH
IC014 TC4052BP SW
Q701,703 2SC2785
D504 ISS119
D516,523 ISS119
BPF F1 1.4MHz
IF AMP
QUADRATUR DET
AFC
AUDIO
LEVEL DET
PB LA
PB LB
DYNAMIC EMPHASIS LEV
LIM
VCA
DET
DEV F1
DEV F2
D011 MC931
IC013 NJM4562D
Q716 2SC2785
D508 RD5.6E-B
Q709,710 2SA1175
D509–512 TLG123A
Q708 2SC2785
Q013 2SC403SP AMP
IC003 μPC1167C2 DE-MOD
T006 DIST Ra
IC007 TL082CP AMP
BPF F2 2.1MHz
PB RA
PB RB
Q012 2SC1652 BUFFER
Q723 DTC144EF SW
D013 MC931
IC019 TC4001BP LOGIC
IC018 TC4093BP LOGIC
Q016 2SC403SP AMP
IC004 μPC1167C2 DE-MOD
T008 DIST Rb
Q049 DTC144ES
Q529,530 ISS119
D019 ISS133
D531 ISS119
Q044 2SC1652
Q032
Q714 2SA844
Q712 2SA1175 SW
D514 ISS119
Q711 2SC2785 SW
Q706 2SC1652
IC018 TC4093BP LOGIC
IC005 (1/2)
IC020 MB88201-152G
Q034 2SC1652 SW
Q032 2SC1652 SW
D027 ISS133
PB12V
D505 RD5.6E-B
D517 ISS119
Q007,008 ISS119
Q007 2SD774 REGULATOR
D025 RD6.2E-B
D522 ISS119
D017 ISS133
Q715 2SA844
Q713 2SA1175
IC005 μPC393C DOC-DET/PG DELAY
Q707 2SA937 SW
IC019 TC4001BP LOGIC
Q017 2SC2785 SW
Q046 2SC2785
Q035 2SC1652
Q004 2SC2785 SW
Q003
no mark : REC mode
( ) : PB mode

NE AMP), HP-7 (HEADPHONE JACK), SW-31 (FUNCTION SWITCH), SV-12 (AUDIO LEVEL), LEVEL METER UNIT SCHEMATIC DIAGRAM

D : 6500 series –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IC010,011 AN6120 MOD
IC014 TC4052BP SW
IC013 NJM4562D
IC018 TC4093BP LOGIC
IC019 TC4001BP LOGIC
IC501 LA7048 AMP/SW
AM-5 BOARD
CN501(WHT)
CN502(BLK)
CN503(RED)
TO SS-28 BOARD CN615
TO YC-28 BOARD CN007
TO RP-17 BOARD CN102
TO SW REG BLOCK M BOARD CN001
TO FU-22 BOARD
TO SS-28 BOARD CN305
TO SS-28 BOARD CN612
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO HEAD
FU-22 (1/2) BOARD
PHONES LEVEL
PT-7 (1/2) BOARD
HP-7 BOARD
JK401 HEADPHONE
RL-18 BOARD
IC801 μPC358C AMP
LEVEL METER UNIT
SV-12 BOARD
REC LEVEL
SW-31 BOARD
S601 INPUT SELECT
S602 LEVEL METER
S603 RECORD
S604 MPX FILTER
S605 BETA Hi-Fi
S606 TONE
CHASSIS EARTH
no mark : REC mode
( ) : PB mode

- All resist
- All capac
  50V or l
- All variab
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- The volt
  when the
- The volt

Note: Th
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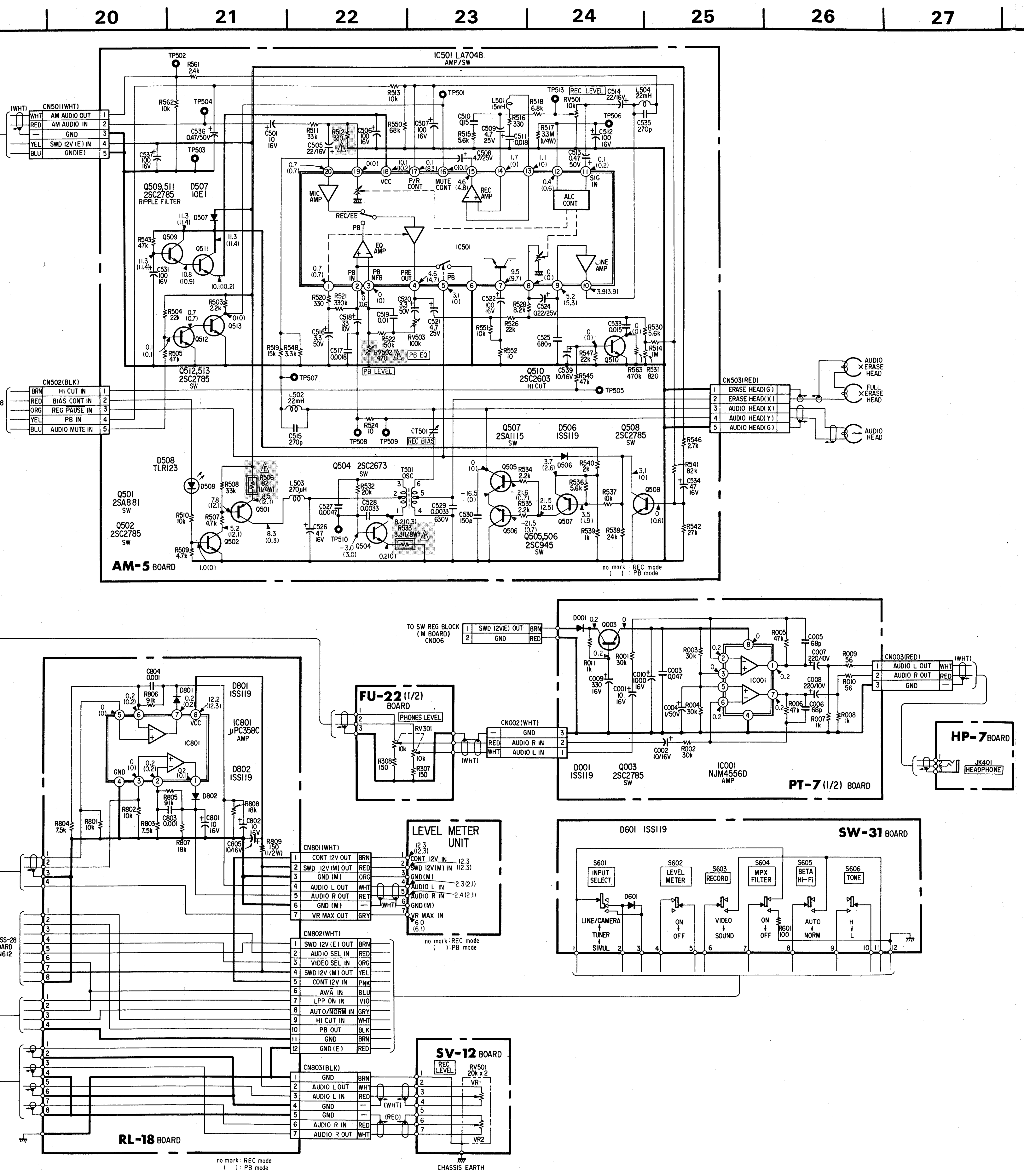
UNIT SCHEMATIC DIAGRAM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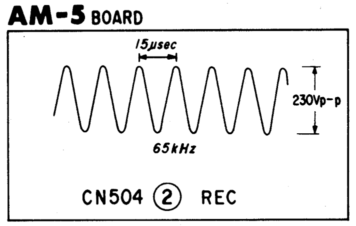
A
B
C
D
E
F
G
H
I
J
AM-5 BOARD
IC501 LA7048 AMP/SW
CN501(WHT)
AM AUDIO OUT
AM AUDIO IN
GND
SWD 12V (E) IN
GND(E)
CN502(BLK)
HI CUT IN
BIAS CONT IN
REC PAUSE IN
PB IN
AUDIO MUTE IN
CN503(RED)
ERASE HEAD(G)
ERASE HEAD(X)
AUDIO HEAD(X)
AUDIO HEAD(Y)
AUDIO HEAD(G)
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO HEAD
MIC AMP
REC/EE
PB
EQ AMP
P/R CONT
MUTE CONT
REC AMP
ALC CONT
SIG IN
LINE AMP
PB LEVEL
PB EQ
REC BIAS
REC LEVEL
T501 OSC
no mark : REC mode
( ) : PB mode
FU-22 (1/2) BOARD
PHONES LEVEL
PT-7 (1/2) BOARD
IC001 NJM4556D AMP
TO SW REG BLOCK (M BOARD) CN006
SWD 12V(E) OUT
CN002(WHT)
AUDIO R IN
AUDIO L IN
CN003(RED)
AUDIO L OUT
AUDIO R OUT
HP-7 BOARD
JK401 HEADPHONE
IC801 μPC359C AMP
CN801(WHT)
CONT 12V OUT
SWD 12V (M) OUT
GND (M)
AUDIO L OUT
AUDIO R OUT
VR MAX OUT
LEVEL METER UNIT
CN802(WHT)
SWD 12V (E) OUT
AUDIO SEL IN
VIDEO SEL IN
SWD 12V (M) OUT
CONT 12V IN
AVA IN
LPP ON IN
AUTO/NORM IN
HI CUT IN
PB OUT
GND
GND (E)
CN803(BLK)
RL-18 BOARD
SV-12 BOARD
RV501 20k x 2
CHASSIS EARTH
SW-31 BOARD
D601 1SS119
S601 INPUT SELECT
S602 LEVEL METER
S603 RECORD
S604 MPX FILTER
S605 BETA Hi-Fi
S606 TONE
LINE/CAMERA
TUNER
SIMUL
ON
OFF
VIDEO
SOUND
AUTO
NORM
H
L

- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ▭ : Fusible resistor
- ―― : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

AM-5 BOARD

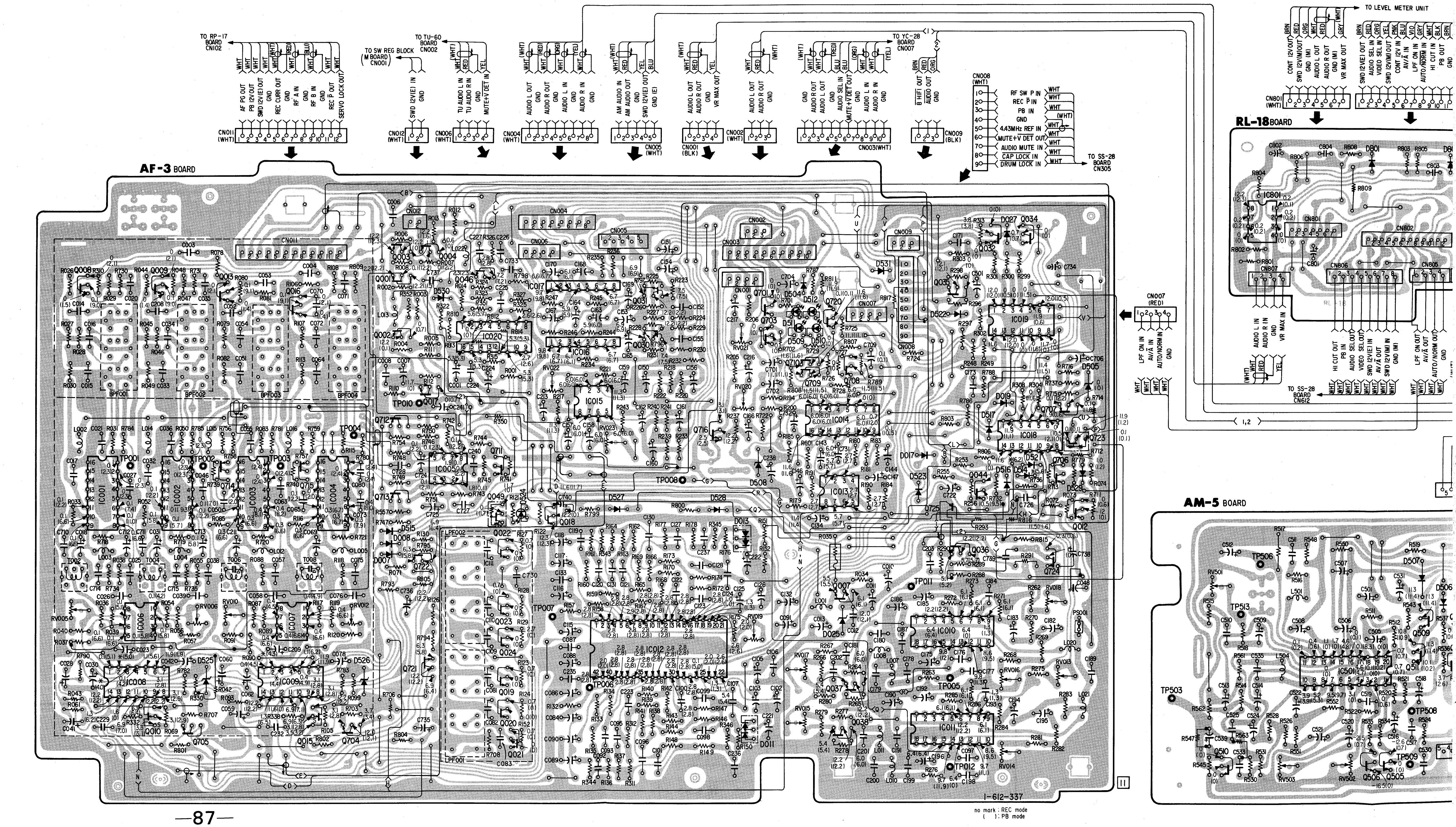


AUDIO AUDIO

AF-3 (AFM SIGNAL RECORD/PLAYBACK PROCESS), AM-5 (AUDIO SIGNAL REC/PB PROCESS), RL-18 (LEVEL METER DRIVE), FU-22 (HEADPHONE LEVEL), PT-7 (HEADPHONE AMP), HP-7 (HEADPHONE JACK), SW-31 (FUNCTION SWITCH), SV-12 (AU

– Ref. No. AF-3 BOARD : 3000 series, AM-5 BOARD : 2500 series, RL-18 BOARD : 5800 series, FU-22 BOARD : 7300 series, PT-7 BOARD : 7700 series, HP-7 BOARD : 5400 series, SW-31 BOARD : 6600 series, SV-12 BOARD : 6500 series –

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Q, IC			008 IC001	009 IC002 IC006 IC008 010 705 013 714	IC003 016 715 IC004 IC007 IC009 015	704 003 001 002 712 713 004 017 722	721 IC005 046 IC020 711 049 022 023 024 019 020 021	018 IC017 IC016 IC015	031 030 IC012 716	701 703 710 709	720 IC014 IC013 007 038 708 037	035 725 036 IC010 IC011 032 044 034 IC019 IC018	707 706 724 723 012	510	IC801	IC501 506 505 511	509
D			RV005	525		526 515 008 007	530 524	527	528	013 011 508 504 511,512 509,510	025 531 017 523	522 517 027 019 516 521 514	505 529			801 507	506 8
ADJ TP			TP001	TP002 RV006 RV010	TP003	TP004 RV102 TP010		RV022 TP007 RV023 TP006	TP008	RV021 RV020 RV019 RV017 RV015	TP011	TP005 TP012 RV016 RV014	RV018 RV013	TP503 RV501	TP513 TP506 RV503	RV502 TP508 TP509	


TO RP-17 BOARD CN102
TO SW REG BLOCK (M BOARD) CN001
TO TU-60 BOARD CN002
TO YC-28 BOARD CN007
TO LEVEL METER UNIT
TO SS-28 BOARD CN305
TO SS-28 BOARD CN612
CN011 (WHT)
CN012 (WHT)
CN006 (WHT)
CN004 (WHT)
CN005 (WHT)
CN001 (BLK)
CN002 (WHT)
CN003 (WHT)
CN009 (BLK)
CN008 (WHT)
CN007 (RED)
CN801 (WHT)
AF-3 BOARD
RL-18 BOARD
AM-5 BOARD
AF PB OUT
PB 12V(E) OUT
SWD 12V(E) OUT
GND
REC CURR OUT
GND
RF A IN
RF B IN
GND
REC P OUT
SERVO LOCK OUT
SWD 12V(E) IN
GND
TU AUDIO L IN
TU AUDIO R IN
GND
MUTE+V DET IN
AUDIO L OUT
AUDIO R OUT
AUDIO L IN
AUDIO R IN
AM AUDIO IN
AM AUDIO R IN
SWD 12V(E) OUT
GND (E)
VR MAX OUT
AUDIO SEL IN
MUTE+V DET OUT
B HIFI OUT
RF SW P IN
REC P IN
PB IN
4.43MHz REF IN
MUTE+V DET OUT
AUDIO MUTE IN
CAP LOCK IN
DRUM LOCK IN
CONT 12V OUT
SWD 12V(M) OUT
VIDEO SEL OUT
AV/A IN
AUTO/NORM IN
HI CUT IN
LPF ON IN
PB IN
WHT
RED
ORG
YEL
BLU
BRN
GRY
PNK
VIO
BLK
1-612-337

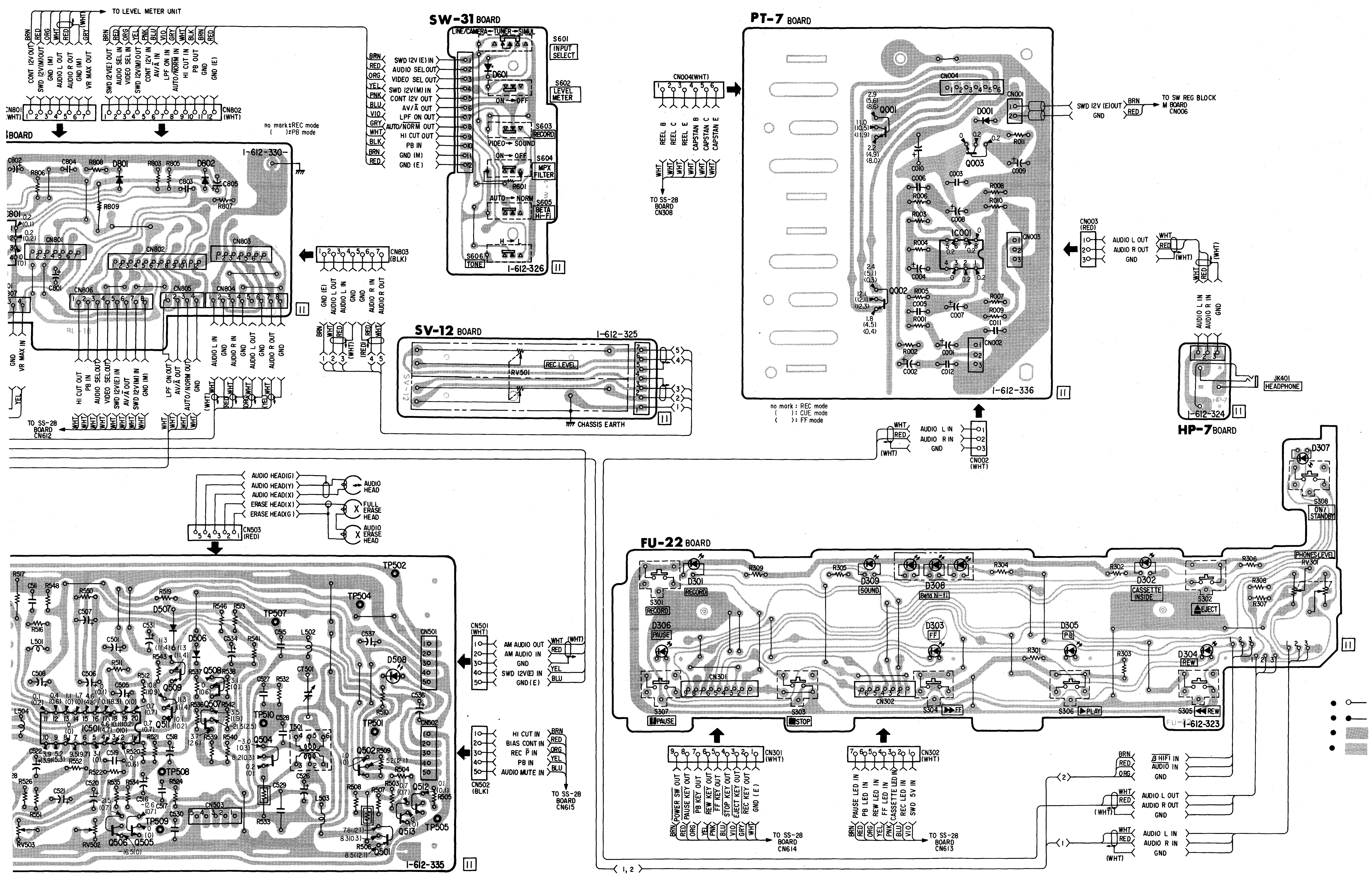
no mark : REC mode
( ) : PB mode

JNCTION SWITCH), SV-12 (AUDIO LEVEL), LEVEL METER UNIT. PRINTED WIRING BOARDS

15	16	17	18	19	20	21	22	23	24	25	26	27	
	IC501 506 505 511	509 508 507 504	502 501	513 512				001 002	003 IC001				Q · IC
	801 507	802 506	508	601		301 306		309	001 303	305	302 304	307	D
506 RV503	RV502 TP508 TP509	TP507 TP510	CT501 TP504	TP502 TP501 TP505	RV501							RV301	ADJ TP

28 29 30 31

A B C D E F G H I J


TO LEVEL METER UNIT
CN801 (WHT)
CN802 (WHT)
BOARD
no mark: REC mode
( ): PB mode
1-612-330
CN801
CN802
CN803
CN806
CN805
CN804
CN803 (BLK)
TO SS-28 BOARD CN612
SW-31 BOARD
LINE/CAMERA - TUNER - SIMUL
S601 INPUT SELECT
S602 LEVEL METER
S603 RECORD
S604 MPX FILTER
S605 BETA Hi-Fi
S606 TONE
1-612-326
SWD 12V (E) IN
AUDIO SEL OUT
VIDEO SEL OUT
SWD 12V (M) IN
CONT 12V OUT
AV/Ā OUT
LPF ON OUT
AUTO/NORM OUT
HI CUT OUT
PB IN
GND (M)
GND (E)
SV-12 BOARD
1-612-325
RV501
REC LEVEL
CHASSIS EARTH
PT-7 BOARD
CN004 (WHT)
REEL B
REEL C
REEL E
CAPSTAN B
CAPSTAN C
CAPSTAN E
TO SS-28 BOARD CN308
SWD 12V (E) OUT
GND
TO SW REG BLOCK M BOARD CN006
CN003 (RED)
AUDIO L OUT
AUDIO R OUT
1-612-336
no mark: REC mode
( ): CUE mode
⟨ ⟩: FF mode
AUDIO L IN
AUDIO R IN
CN002 (WHT)
JK401 HEADPHONE
1-612-324
HP-7 BOARD
AUDIO HEAD (G)
AUDIO HEAD (Y)
AUDIO HEAD (X)
ERASE HEAD (X)
ERASE HEAD (G)
AUDIO HEAD
FULL ERASE HEAD
AUDIO ERASE HEAD
CN503 (RED)
CN501 (WHT)
AM AUDIO OUT
AM AUDIO IN
SWD 12V (E) IN
CN502 (BLK)
HI CUT IN
BIAS CONT IN
REC P̄ IN
AUDIO MUTE IN
TO SS-28 BOARD CN615
1-612-335
FU-22 BOARD
S301 RECORD
D306 PAUSE
S307 PAUSE
S303 STOP
D308 Beta hi-fi
D309 SOUND
D303 FF
S304 FF
D305 PB
S306 PLAY
D302 CASSETTE INSIDE
S302 EJECT
D304 REW
S305 REW
D307
S308 ON/STANDBY
PHONES LEVEL RV301
1-612-323
CN301 (WHT)
POWER SW OUT
PAUSE KEY OUT
PB KEY OUT
REW KEY OUT
FF KEY OUT
STOP KEY OUT
EJECT KEY OUT
REC KEY OUT
GND (E)
TO SS-28 BOARD CN614
CN302 (WHT)
PAUSE LED IN
PB LED IN
REW LED IN
FF LED IN
CASSETTE LED IN
REC LED IN
SWD 5V IN
TO SS-28 BOARD CN613
β HIFI IN
AUDIO IN
(1, 2)

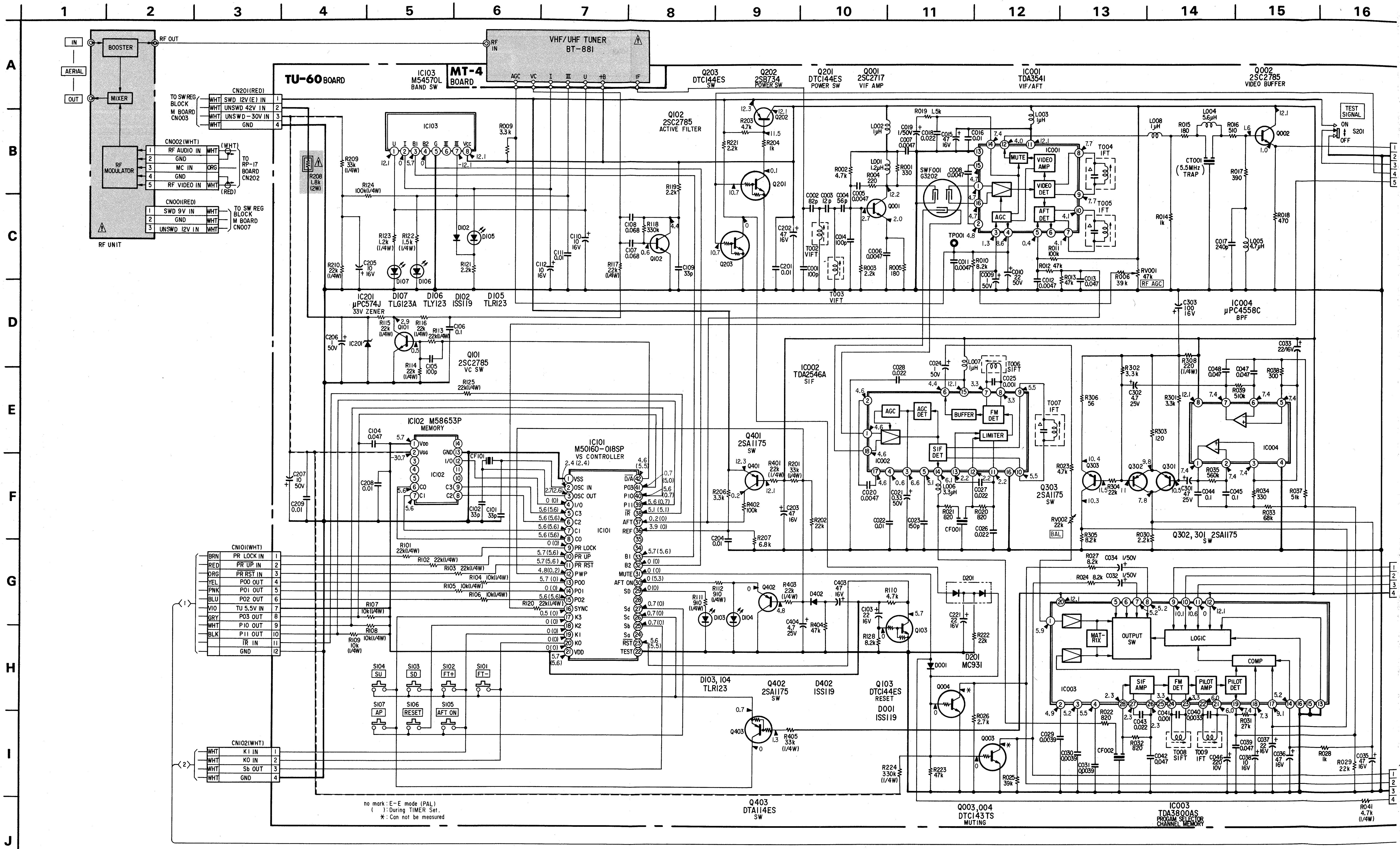
no mark : REC mode
( ) : PB mode

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern

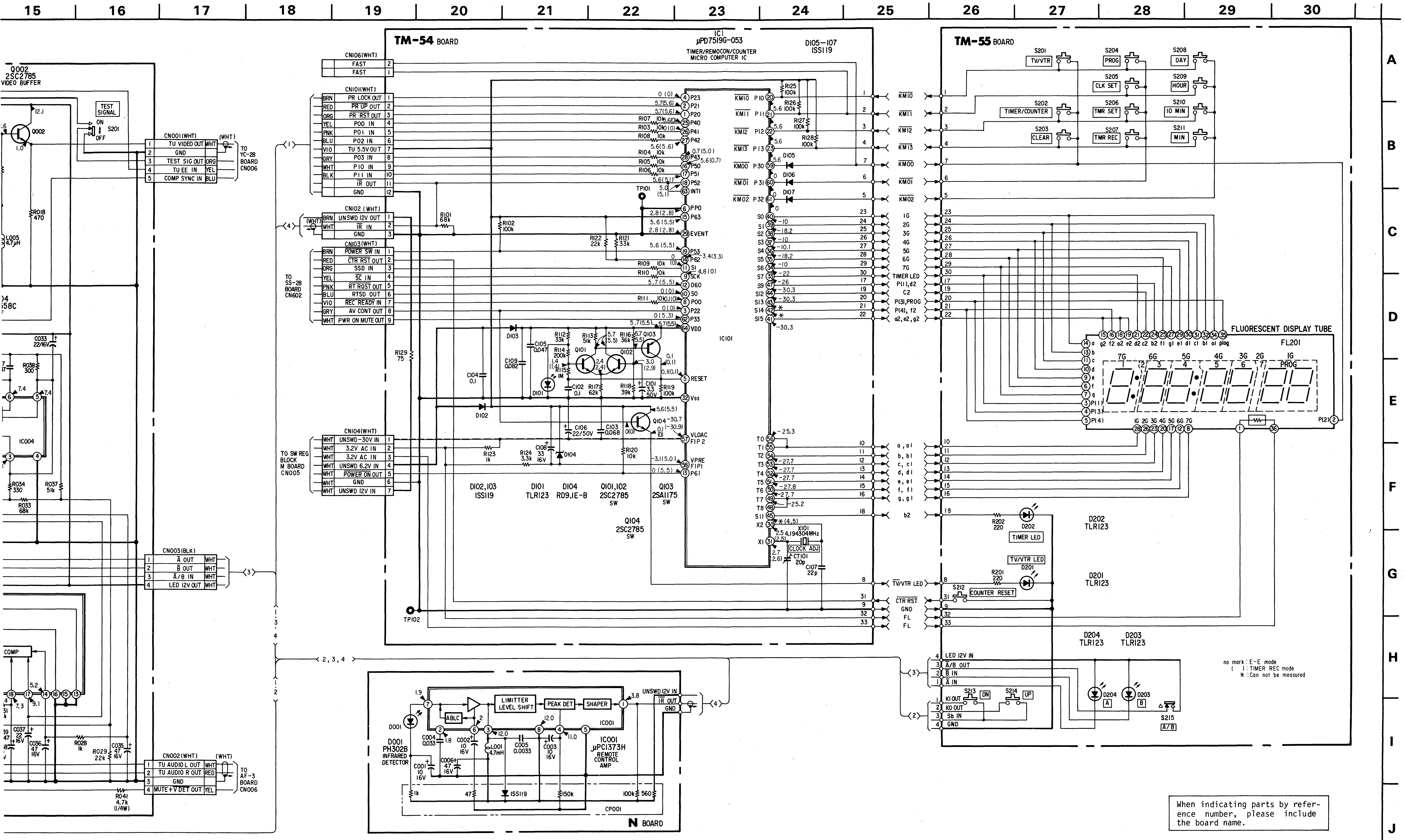
When indicating parts by reference number, please include the board name.

4-5. TU-60 (VIF, SIF, AFT, AGC CHANNEL PRESET), MT-4 (TUNER), TM-54 (TIMER, REMOTE CONTROL, COUNTER), TM-55 (CHANNEL SWITCH, TIMER SWITCH), N (INFRARED AMP) SCHEMATIC DIAGRAM

– Ref. No. TU-60, MT-4 BOARD : 5000 series, TM-54 BOARD: 6100 series, TM-55 BOARD : 6200 series, N BOARD : 6400 series –



RF UNIT
BOOSTER
MIXER
RF MODULATOR
AERIAL
IN
OUT
RF OUT
VHF/UHF TUNER BT-881
MT-4 BOARD
TU-60 BOARD
IC103 M54570L BAND SW
Q203 DTC144ES SW
Q202 2SB734 POWER SW
Q201 DTC144ES POWER SW
Q001 2SC2717 VIF AMP
IC001 TDA3541 VIF/AFT
Q002 2SC2785 VIDEO BUFFER
Q102 2SC2785 ACTIVE FILTER
IC201 μPC574J 33V ZENER
D107 TLG123A
D106 TLY123
D102 ISS119
D105 TLR123
Q101 2SC2785 VC SW
IC102 M58653P MEMORY
IC101 M50160-018SP VS CONTROLLER
IC002 TDA2546A SIF
IC004 μPC4558C BPF
Q303 2SA1175 SW
Q302, 301 2SA1175 SW
Q401 2SA1175 SW
D103, 104 TLR123
Q402 2SA1175 SW
D402 ISS119
Q103 DTC144ES RESET
D001 ISS119
D201 MC931
Q403 DTA114ES SW
Q003, 004 DTC143TS MUTING
IC003 TDA3800AS PROGRAM SELECTOR CHANNEL MEMORY
TEST SIGNAL
S201 ON OFF
SWF001 G3202
T004 IFT
T005 IFT
T002 VIFT
T003 VIFT
T006 SIFT
T007 IFT
T008 SIFT
T009 IFT
CT001 (5.5MHz TRAP)
TP001
RV001 RF AGC
RV002 BAL
CN201(RED) TO SW REG BLOCK M BOARD CN003
SWD 12V(E) IN
UNSWD 42V IN
UNSWD −30V IN
GND
CN002(WHT) TO RP-17 BOARD CN202
RF AUDIO IN
GND
MC IN
GND
RF VIDEO IN
CN001(RED) TO SW REG BLOCK M BOARD CN007
SWD 9V IN
GND
UNSWD 12V IN
CN101(WHT)
PR LOCK IN
PR UP IN
PR RST IN
P00 OUT
P01 OUT
P02 OUT
TU 5.5V IN
P03 OUT
P10 OUT
P11 OUT
IR IN
GND
CN102(WHT)
KI IN
KO IN
Sb OUT
GND
S104 SU
S103 SD
S102 FT+
S101 FT−
S107 AP
S106 RESET
S105 AFT ON
MUTE
VIDEO AMP
VIDEO DET
AGC
AFT DET
AGC DET
BUFFER
FM DET
LIMITER
SIF DET
MAT-RIX
OUTPUT SW
LOGIC
COMP
SIF AMP
PILOT AMP
PILOT DET
R208 1.8k (2W)
no mark : E-E mode (PAL)
( ) : During TIMER Set.
* : Can not be measured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TM-54 BOARD
TM-55 BOARD
N BOARD
IC1 µPD7519G-053 TIMER/REMOCON/COUNTER MICRO COMPUTER IC
D105–107 ISS119
Q002 2SC2785 VIDEO BUFFER
TEST SIGNAL
S201 ON OFF
CN001(WHT)
TU VIDEO OUT
GND
TEST SIG OUT
TU EE IN
COMP SYNC IN
TO YC-28 BOARD CN006
CN106(WHT)
FAST
CN101(WHT)
PR LOCK OUT
PR UP OUT
PR RST OUT
P00 IN
P01 IN
P02 IN
TU 5.5V OUT
P03 IN
P10 IN
P11 IN
IR OUT
GND
CN102 (WHT)
UNSWD 12V OUT
IR IN
CN103(WHT)
POWER SW IN
CTR RST OUT
SSD IN
SC IN
RT RCST OUT
RTSD OUT
REC READY IN
AV CONT OUT
PWR ON MUTE OUT
TO SS-28 BOARD CN602
CN104(WHT)
UNSWD-30V IN
3.2V AC IN
UNSWD 6.2V IN
POWER ON OUT
UNSWD 12V IN
TO SW REG BLOCK M BOARD CN005
CN003(BLK)
A OUT
B OUT
A/B IN
LED 12V OUT
CN002(WHT)
TU AUDIO L OUT
TU AUDIO R OUT
MUTE+V DET OUT
TO AF-3 BOARD CN006
TP101
TP102
RESET
Vss
VDD
VLOAC
FIP2
VPRE
FIP1
EVENT
INT1
IC101
D102,103 ISS119
D101 TLR123
D104 RD9.1E-B
Q101,102 2SC2785 SW
Q103 2SA1175 SW
Q104 2SC2785 SW
X101 4.194304MHz
CLOCK ADJ
CT101 20p
C107 22p
KM10
KM11
KM12
KM13
KM00
KM01
KM02
1G
2G
3G
4G
5G
6G
7G
TIMER LED
P(1),d2
c2
P(3),PROG
P(4), f2
a2,e2,g2
a, a1
b, b1
c, c1
d, d1
e, e1
f, f1
g, g1
b2
TV/VTR LED
CTR RST
GND
FL
S201 TV/VTR
S202 TIMER/COUNTER
S203 CLEAR
S204 PROG
S205 CLK SET
S206 TMR SET
S207 TMR REC
S208 DAY
S209 HOUR
S210 10 MIN
S211 MIN
FLUORESCENT DISPLAY TUBE
FL201
PROG
D202 TIMER LED
D202 TLR123
D201 TV/VTR LED
D201 TLR123
S212 COUNTER RESET
D204 TLR123
D203 TLR123
LED 12V IN
A/B OUT
B IN
A IN
S213 DN
S214 UP
K1 OUT
K0 OUT
Sb IN
S215 A/B
D001 PH302B INFRARED DETECTOR
LIMITTER LEVEL SHIFT
PEAK DET
SHAPER
ABLC
IC001
IC001 µPC1373H REMOTE CONTROL AMP
CP001
UNSWD 12V IN
IR OUT
L001 4.7mH
2,3,4

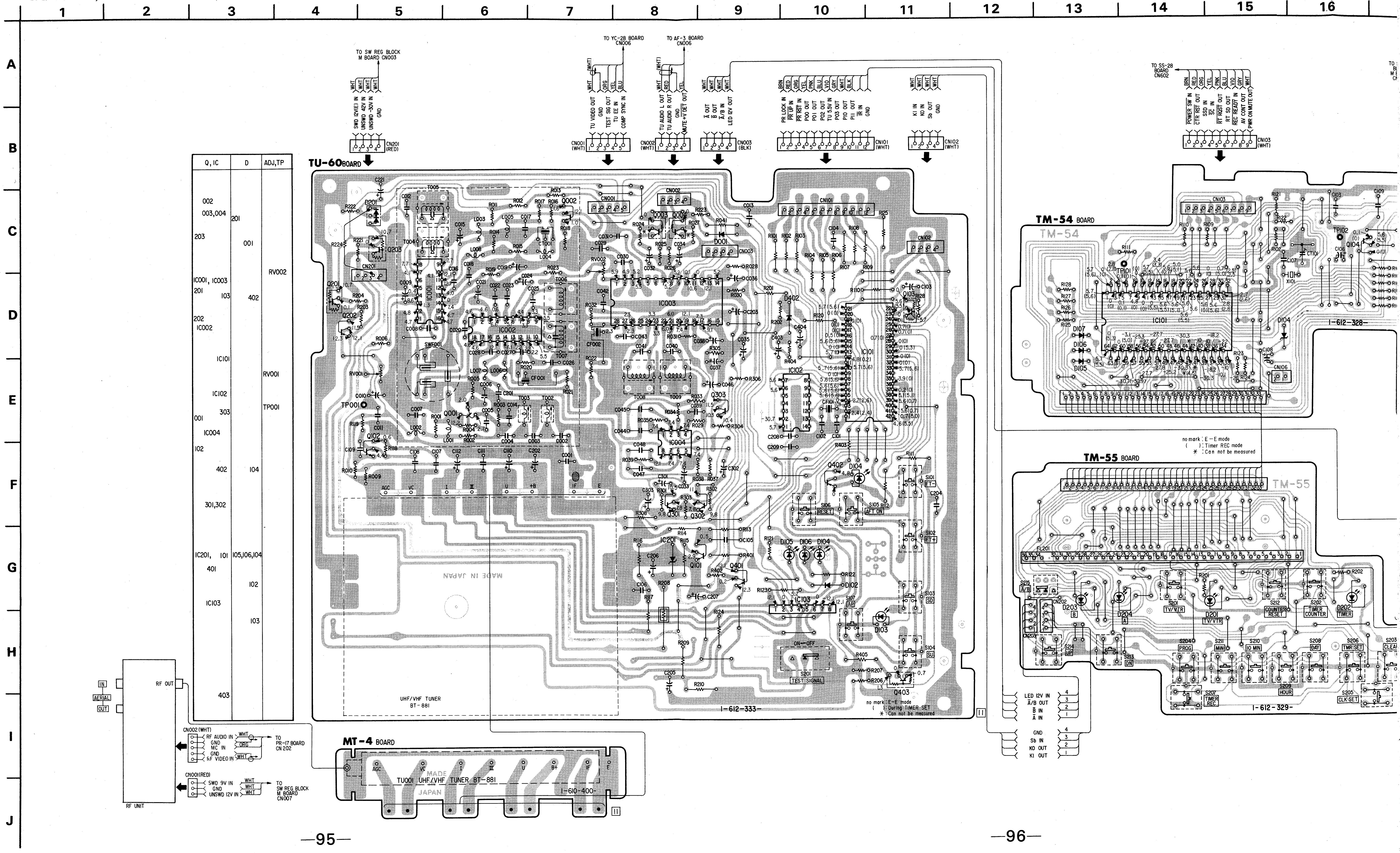
no mark : E-E mode
( ) : TIMER REC mode
✽ : Can not be measured

When indicating parts by reference number, please include the board name.

TUNER/TIMER TUNER/TIMER

TU-60 (VIF, SIF, AFT, AGC CHANNEL PRESET), MT-4 (TUNER), TM-54 (TIMER, REMOTE CONTROL, COUNTER), TM-55 (CHANNEL SWITCH, TIMER SWITCH), N (INFRARED AMP) PRINTED WIRING BOARDS

– Ref. No. TU-60, MT-4 BOARD : 5000 series, TM-54 BOARD: 6100 series, TM-55 BOARD : 6200 series, N BOARD : 6400 series –



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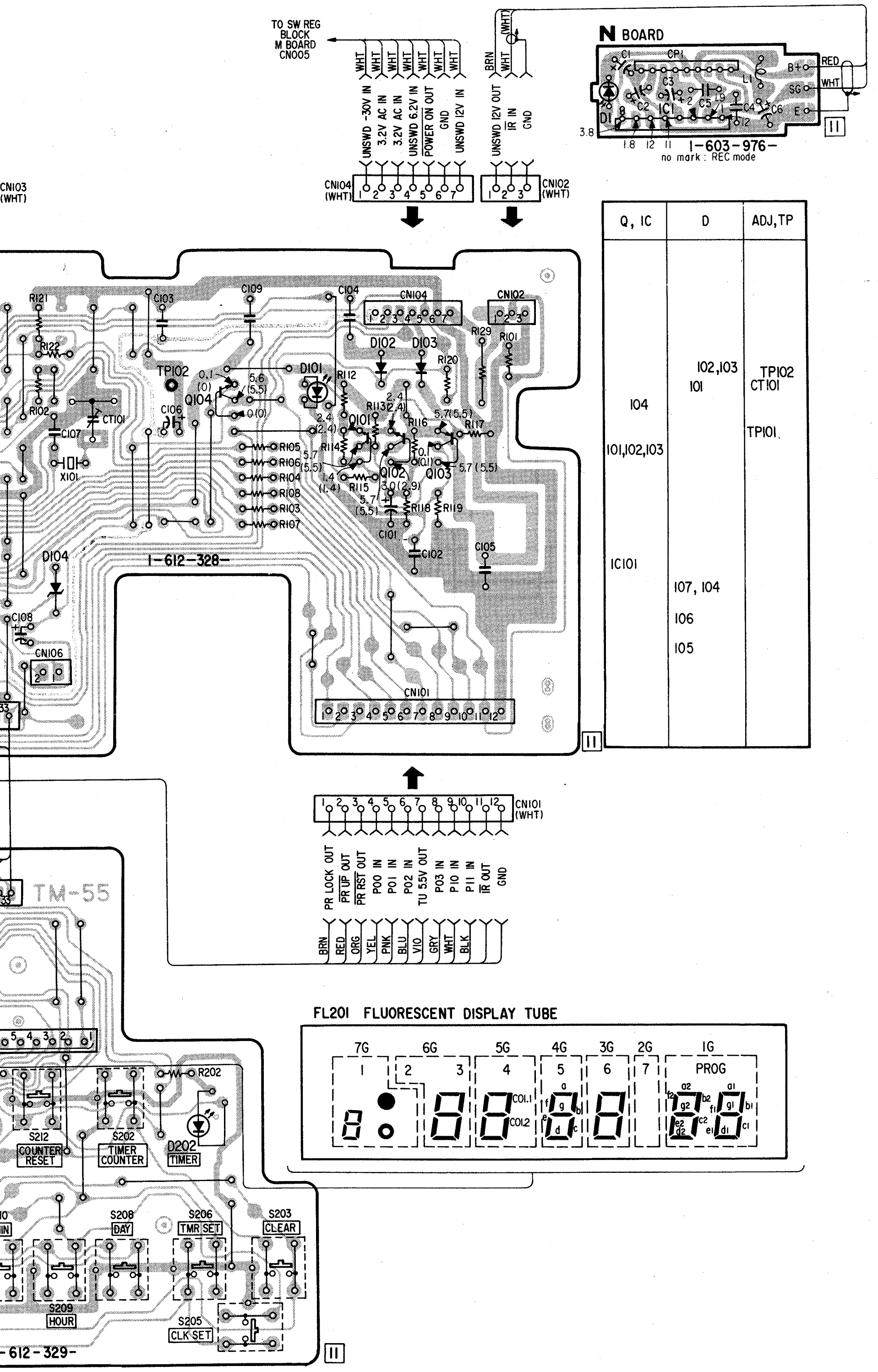
I
J
TO SW REG BLOCK M BOARD CN003
SWD (DVE) 9V IN
UNSWD 12V IN
UNSWD 30V IN
GND
CN201 (RED)
TO YC-28 BOARD CN006
TU VIDEO OUT
GND
TEST SIG OUT
TU EE IN
COMP SYNC IN
CN001 (WHT)
TO AF-3 BOARD CN006
TU AUDIO L OUT
TU AUDIO R OUT
GND
MUTE + DET OUT
CN002 (WHT)
Ā OUT
B̄ OUT
Ā/B IN
LED 12V OUT
CN003 (BLK)
PR LOCK IN
PR UP IN
PR RST IN
P00 OUT
P01 OUT
P02 OUT
TU 5.5V IN
P03 OUT
P10 OUT
P11 OUT
IR IN
GND
CN101 (WHT)
KI IN
KO IN
Sb OUT
GND
CN102 (WHT)
TO SS-28 BOARD CN602
POWER SW IN
CTR RST OUT
SSD IN
SC IN
RT RST OUT
RT SD OUT
REC READY IN
AV CONT OUT
PWR ON MUTE OUT
CN103 (WHT)
TU-60 BOARD
TM-54 BOARD
TM-55 BOARD
MT-4 BOARD
IC001
IC002
IC003
IC004
IC101
IC102
IC103
IC201
SWF001
CF001
CF002
RV001
RV002
TP001
S101 FT–
S102 FT+
S103 SD
S104 SU
S105 AFT ON
S106 RESET
S107 AP
S201 TEST SIGNAL
ON – OFF
UHF/VHF TUNER BT-881
TU001 UHF/VHF TUNER BT-881
MADE IN JAPAN
AGC
VC
I
III
U
+B
B+
IF
E
1-612-333-
1-612-328-
1-612-329-
1-610-400-
no mark : E-E mode
( ) : During TIMER SET
＊ : Can not be measured
no mark : E–E mode
( ) : Timer REC mode
＊ : Can not be measured
S201 TV/VTR
S202 TIMER COUNTER
S203 CLEAR
S204 PROG
S205 CLK/SET
S206 TMR SET
S207 TIMER REC
S208 DAY
S209 HOUR
S210 10 MIN
S211 MIN
S212 COUNTER RESET
S213 DN
S214 UP
S215 Ā/B
D201 TV/VTR
D202 TIMER
D203 B
D204 A
FL201
CN202
CN203
LED 12V IN
Ā/B OUT
B̄ IN
Ā IN
GND
Sb IN
KO OUT
KI OUT
IN
AERIAL
OUT
RF OUT
RF UNIT
CN002 (WHT)
RF AUDIO IN
GND
MC IN
GND
RF VIDEO IN
WHT
ORG
WHT
TO PR-17 BOARD CN 202
CN001 (RED)
SWD 9V IN
GND
UNSWD 12V IN
TO SW REG BLOCK M BOARD CN007

Q, IC	D	ADJ, TP
002		
003,004	201	
203		
	001	
		RV002
IC001, IC003		
201 103	402	
202		
IC002		
IC101		
		RV001
IC102		
		TP001
303		
001		
IC004		
102		
402	104	
301,302		
IC201, 101	105,106,104	
401		
	102	
IC103		
	103	
403		


TO SW REG BLOCK M BOARD CN005
WHT WHT WHT WHT WHT WHT WHT
UNSWD -30V IN
3.2V AC IN
3.2V AC IN
UNSWD 6.2V IN
POWER ON OUT
GND
UNSWD 12V IN
CN104 (WHT) 1 2 3 4 5 6 7
BRN WHT (WHT)
UNSWD 12V OUT
IR IN
GND
CN102 (WHT) 1 2 3
N BOARD
C1 CP1 L1 C3 C2 IC1 C5 L9 C4 C6 D1
B+ SG E
RED WHT
3.8 1.8 12 11 12
1-603-976-
no mark : REC mode
11
CN103 (WHT)
R121 R122 C103 C109 C104 CN104 CN102 R129 R101
R102 C107 CT101 X101 TP102 Q104 C106 D101 D102 D103 R120 R112 R113 R116 R117
Q101 Q102 Q103 R114 R115 R118 R119 C101 C102 C105
R105 R106 R104 R108 R103 R107
D104 C108 CN106
1-612-328-
CN101 1 2 3 4 5 6 7 8 9 10 11 12
11
CN101 (WHT) 1 2 3 4 5 6 7 8 9 10 11 12
PR LOCK OUT
PR UP OUT
PR RST OUT
P00 IN
P01 IN
P02 IN
TU 5.5V OUT
P03 IN
P10 IN
P11 IN
IR OUT
GND
BRN RED ORG YEL PNK BLU VIO GRY WHT BLK
TM-55
FL201 FLUORESCENT DISPLAY TUBE
7G 6G 5G 4G 3G 2G 1G
1 2 3 4 5 6 7 PROG
COL1 COL2
a b c d e f g
a1 a2 b1 b2 c1 c2 d1 d2 e1 e2 f1 f2 g1 g2
R202 S212 COUNTER RESET S202 TIMER COUNTER D202 TIMER
S208 DAY S206 TMR SET S203 CLEAR S209 HOUR S205 CLK SET
-612-329-
11

Q, IC	D	ADJ,TP
	102,103 101	TP102 CT101
104		
		TP101
101,102,103		
IC101		
	107, 104	
	106	
	105	

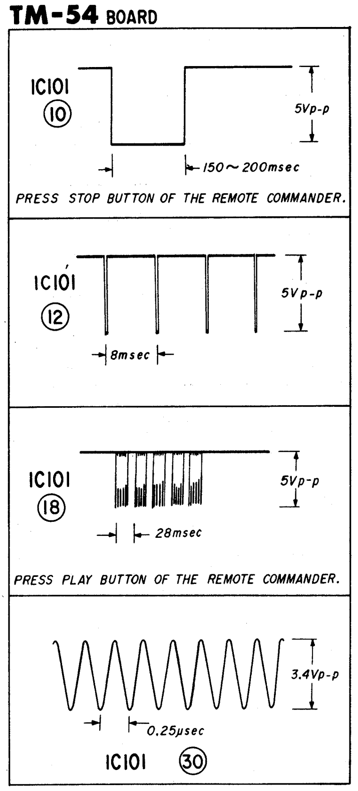
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- : Nonflammable resistor
- : Fusible resistor
- ——— : B + bus.
- - - - : B- bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern

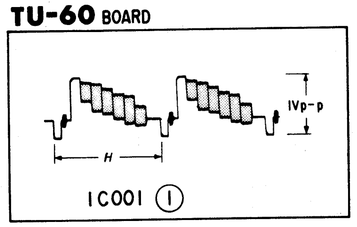
TM-54 BOARD



PRESS STOP BUTTON OF THE REMOTE COMMANDER.

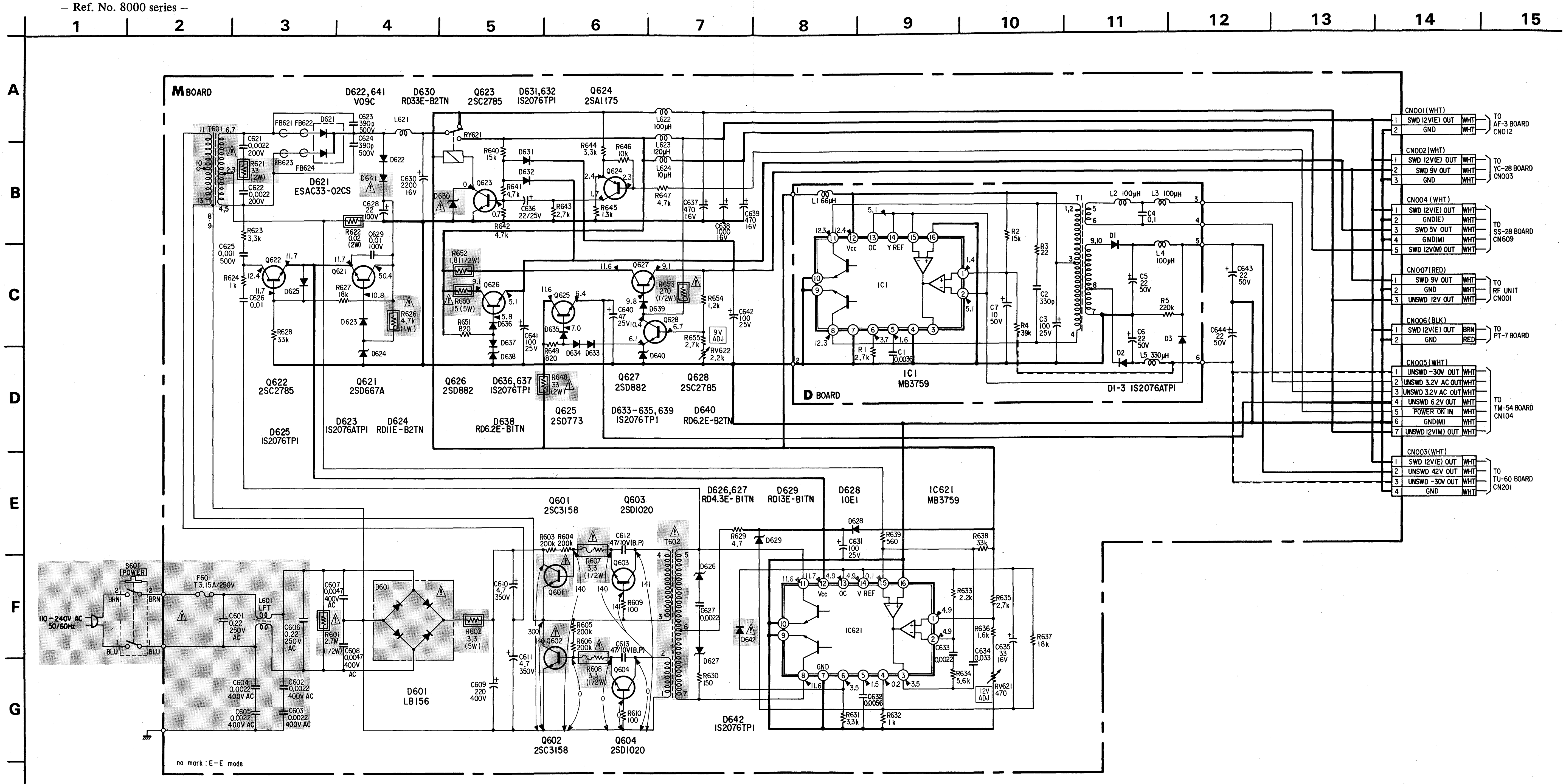
PRESS PLAY BUTTON OF THE REMOTE COMMANDER.

TU-60 BOARD



4-6. SR-19E (POWER SUPPLY) SCHEMATIC DIAGRAM

– Ref. No. 8000 series –


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
M BOARD
D BOARD
D622,641 V09C
D630 RD33E-B2TN
Q623 2SC2785
D631,632 IS2076TPI
Q624 2SA1175
T601
D621 ESAC33-02CS
RY621
Q622 2SC2785
Q621 2SD667A
Q626 2SD882
D636,637 IS2076TPI
Q627 2SD882
Q628 2SC2785
D625 IS2076TPI
D623 IS2076ATPI
D624 RD11E-B2TN
D638 RD6.2E-B1TN
Q625 2SD773
D633-635,639 IS2076TPI
D640 RD6.2E-B2TN
IC1 MB3759
DI-3 IS2076ATPI
Q601 2SC3158
Q603 2SD1020
Q602 2SC3158
Q604 2SD1020
D626,627 RD4.3E-B1TN
D629 RD13E-B1TN
D628 10E1
IC621 MB3759
D601 LB156
D642 IS2076TPI
S601 POWER
F601 T3.15A/250V
L601 LFT
T602
110-240V AC 50/60Hz
BRN
BLU
CN001(WHT)
1 SWD 12V(E) OUT WHT
2 GND WHT
TO AF-3 BOARD CN012
CN002(WHT)
1 SWD 12V(E) OUT WHT
2 SWD 9V OUT WHT
3 GND WHT
TO YC-28 BOARD CN003
CN004(WHT)
1 SWD 12V(E) OUT WHT
2 GND(E) WHT
3 SWD 5V OUT WHT
4 GND(M) WHT
5 SWD 12V(M) OUT WHT
TO SS-28 BOARD CN609
CN007(RED)
1 SWD 9V OUT WHT
2 GND WHT
3 UNSWD 12V OUT WHT
TO RF UNIT CN001
CN006(BLK)
1 SWD 12V(E) OUT BRN
2 GND RED
TO PT-7 BOARD
CN005(WHT)
1 UNSWD -30V OUT WHT
2 UNSWD 3.2V AC OUT WHT
3 UNSWD 3.2V AC OUT WHT
4 UNSWD 6.2V OUT WHT
5 POWER ON IN WHT
6 GND(M) WHT
7 UNSWD 12V(M) OUT WHT
TO TM-54 BOARD CN104
CN003(WHT)
1 SWD 12V(E) OUT WHT
2 UNSWD 42V OUT WHT
3 UNSWD -30V OUT WHT
4 GND WHT
TO TU-60 BOARD CN201
9V ADJ
12V ADJ
no mark : E-E mode

- All resistors are in ohms, 1/4W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ▭ : Fusible resistor
- —— : B + bus.
- – – – : B– bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

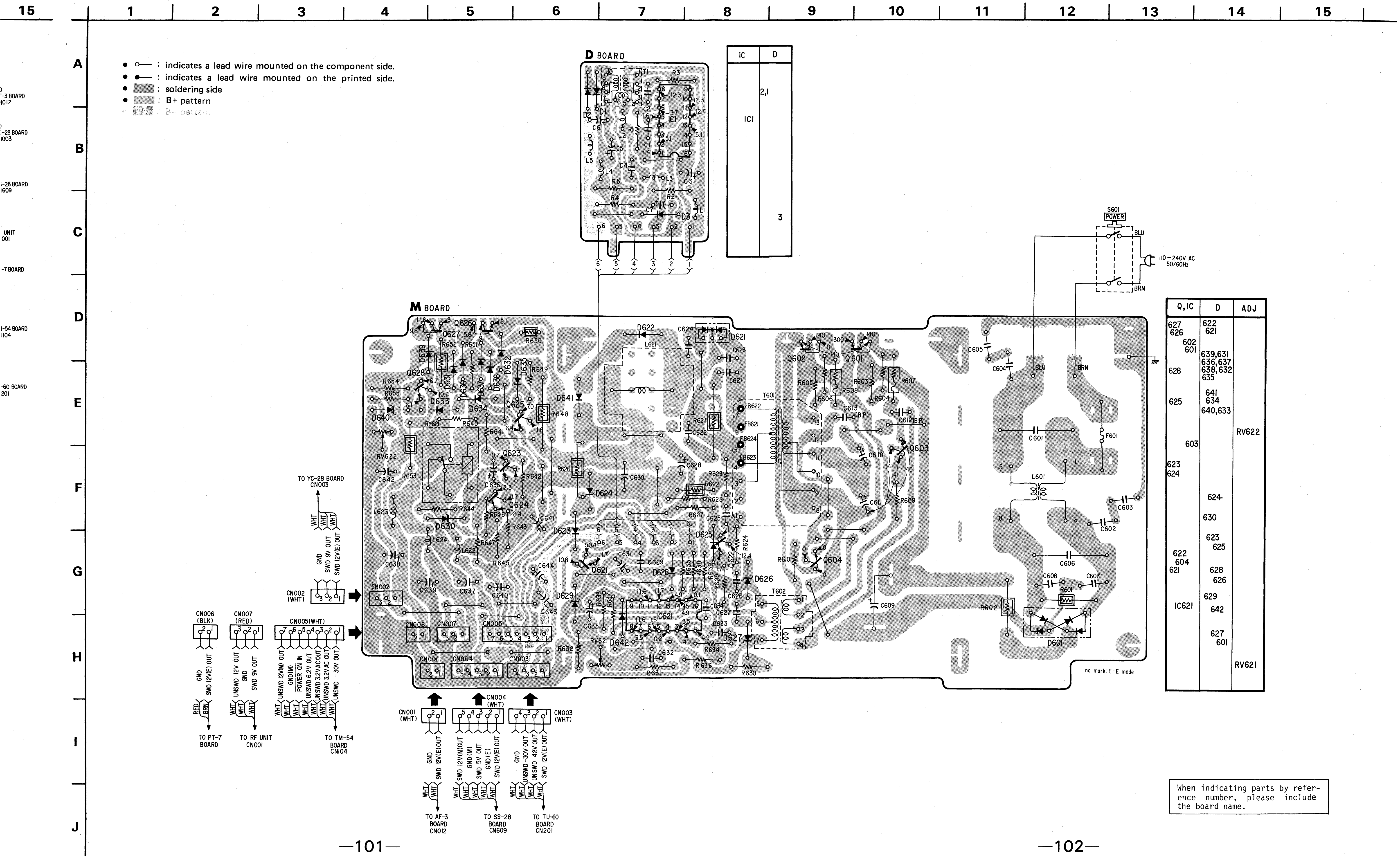
SR-19E (POW

– Ref. No. 800(

SR-19E (POWER SUPPLY) PRINTED WIRING BOARDS

– Ref. No. 8000 series –

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern
- ▨ : B+ pattern


15
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J
-3 BOARD
N012
-28 BOARD
1003
-28 BOARD
1609
UNIT
1001
-7 BOARD
-54 BOARD
1104
-60 BOARD
201
D BOARD
T1
R3
IC1
D1
D2
D3
C1
C2
C3
C4
C5
C6
C7
L1
L2
L3
L4
L5
R1
R2
R4
R5
12.3
12.4
3.7
5.1
M BOARD
Q601
Q602
Q603
Q604
Q621
Q622
Q623
Q624
Q625
Q626
Q627
Q628
IC621
D601
D621
D622
D623
D624
D625
D626
D627
D628
D629
D630
D631
D632
D633
D634
D635
D636
D637
D638
D639
D640
D641
D642
T601
T602
L601
L621
L622
L623
L624
RY621
RV621
RV622
F601
FB621
FB622
FB623
FB624
R601
R602
R603
R604
R605
R606
R607
R608
R609
R610
R621
R622
R623
R624
R626
R627
R628
R629
R630
R631
R632
R633
R634
R635
R636
R637
R638
R639
R640
R641
R642
R643
R644
R645
R646
R647
R648
R649
R650
R651
R652
R653
R654
R655
C601
C602
C603
C604
C605
C606
C607
C608
C609
C610
C611
C612(B.P)
C613(B.P)
C621
C622
C623
C624
C625
C626
C627
C628
C629
C630
C631
C632
C633
C634
C635
C636
C637
C638
C639
C640
C641
C642
C643
C644
S601
POWER
BLU
BRN
110–240V AC
50/60Hz
no mark:E-E mode
TO YC-28 BOARD
CN003
GND
SWD 9V OUT
SWD 12V(E) OUT
CN002
(WHT)
CN006
(BLK)
CN007
(RED)
CN005(WHT)
CN001
CN003
CN004
GND
SWD 12V(E) OUT
RED
BRN
UNSWD 12V OUT
GND
SWD 9V OUT
WHT
UNSWD 12V(M) OUT
GND(M)
POWER ON IN
UNSWD 6.2V OUT
UNSWD 3.2V AC OUT
UNSWD 3.2V AC OUT
UNSWD –30V OUT
TO PT-7
BOARD
TO RF UNIT
CN001
TO TM-54
BOARD
CN104
CN001
(WHT)
CN004
(WHT)
CN003
(WHT)
GND
SWD 12V(E) OUT
SWD 12V(M) OUT
GND(M)
SWD 5V OUT
GND(E)
SWD 12V(E) OUT
GND
UNSWD –30V OUT
UNSWD 42V OUT
SWD 12V(E) OUT
TO AF-3
BOARD
CN012
TO SS-28
BOARD
CN609
TO TU-60
BOARD
CN201

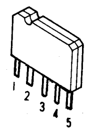
IC	D
	2,1
IC1	
	3

Q,IC	D	ADJ
627 626	622 621	
602 601		
628	639,631 636,637 638,632 635	
625	641 634 640,633	
		RV622
603		
623 624		
	624	
	630	
	623 625	
622 604 621	628 626	
IC621	629 642	
	627 601	
		RV621

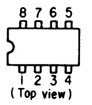
When indicating parts by reference number, please include the board name.

4-7. SEMICONDUCTORS

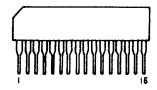
BA634



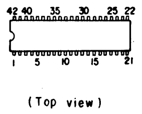
BA4558
HA17558
NJM4556D
NJM4558D
NJM4562D
μPC358C
μPC393C
μPC4558C


8 7 6 5
1 2 3 4
(Top view)

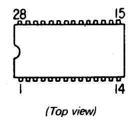
BA7007



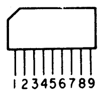
CX194B-0
CX194B-5
CX10021
CX20097
M50160-018SP


42 40 35 30 25 22
1 5 10 15 21
(Top view)

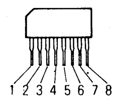
CX866A
CX20045


28
15
1
14
(Top view)

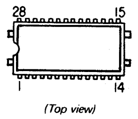
CX894
LA7205



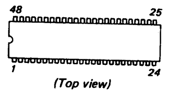
CX7926
CX20061
M54570L
μPC1373H



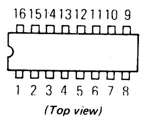
CX10023


28
15
1
14
(Top view)

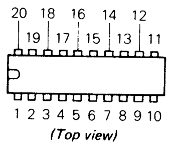
CX20043


48
25
1
24
(Top view)

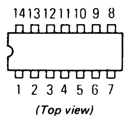
HA12412
MB3759
MB84053B
MB88201-152G
TC4052BP
TC4053BP
TDA3541
μPC1167C2
μPD4053BC


16 15 14 13 12 11 10 9
1 2 3 4 5 6 7 8
(Top view)

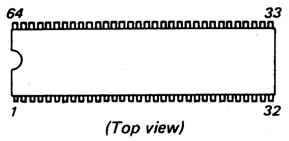
LA7048


20 18 16 14 12
19 17 15 13 11
1 2 3 4 5 6 7 8 9 10
(Top view)

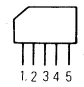
M58653P
MB3614
TC4001BP
TC4066BP
TC4093BP
μPC324C


14 13 12 11 10 9 8
1 2 3 4 5 6 7
(Top view)

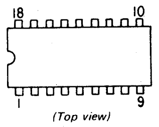
MB88421-141M


64
33
1
32
(Top view)

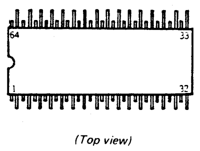
TA7060AP



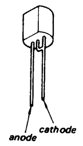
TDA2546A


18
10
1
9
(Top view)

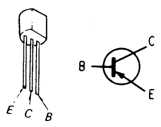
μPD7519G-053


64
33
1
32
(Top view)

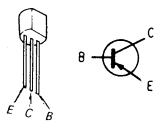
μPC574J


anode
cathode

2SA733-P
2SA844
2SA844-C



2SA772
2SA773
2SA773-13
2SB739
2SB740



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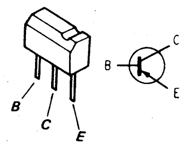
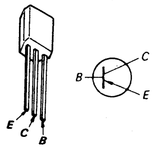
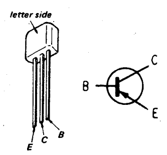
2SA881



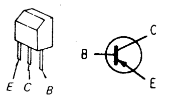
2SA1048
2SA1048-GR
2SA1115



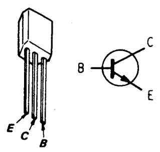
2SA1175


letter side
E C B
B
C
E

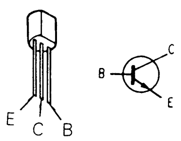
2SB733-4
2SB734



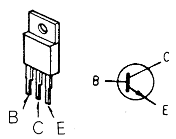
2SC403SP
2SC2458
2SC2603



2SC945-P



2SC1061
2SC2216
2SC2717
2SD313HP



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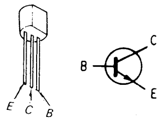
2SC1475
2SC1475-13
2SD667A
2SD788
2SD789



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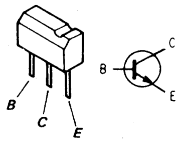
2SC2673



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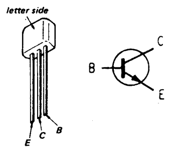
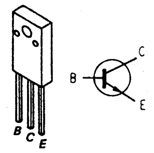
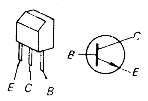
2SD1020


letter side
E C B
B
C
E

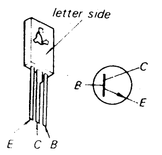
2SC3158



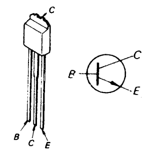
2SD773
2SD774



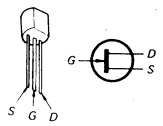
2SD882


letter side
E C B
B
C
E

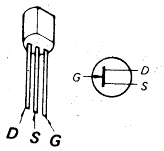
2SD1164



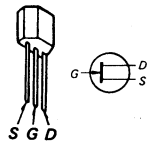
2SK108



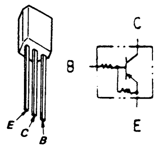
2SK152



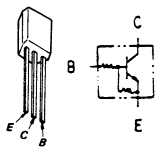
2SK514
2SK514-H



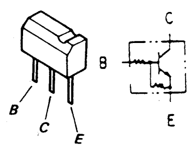
DTA114ES



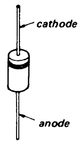
DTC124ES
DTC143TS
DTC144ES
DTC144WS



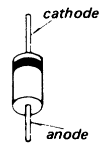
DTC144EF



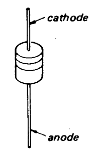
10E1
10E2


cathode
anode

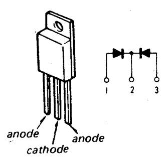
1S1555
1S2076
1S2076ATP1
1S2473
1SS106
HZT33-02
RD4.3E-B1TN
RD5.6E-B
RD6.2E-B
RD6.2E-B1TN
RD6.2E-B2TN
RD7.5E-B
RD9.1E-B
RD10E-B1
RD10E-B2
RD11E-B2TN
RD13E-B1TN
RD33E-B2TN


cathode
anode

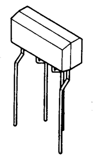
1SS119
1SS133
1SS148


cathode
anode

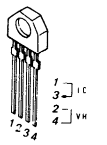
ESAC33-02CS


anode
cathode
anode
1 2 3

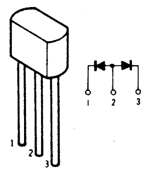
LB-156



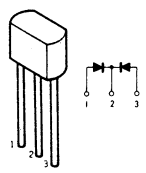
LT-9230N


1
3 IC
2
4 VH
1 2 3 4

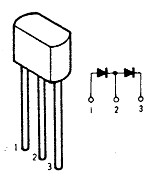
MC911



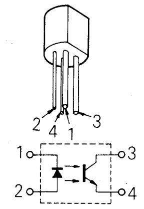
MC921



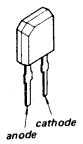
MC931



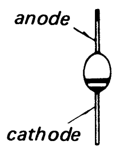
GP-2S02A



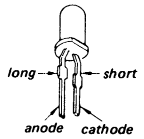
PH302B


cathode
anode

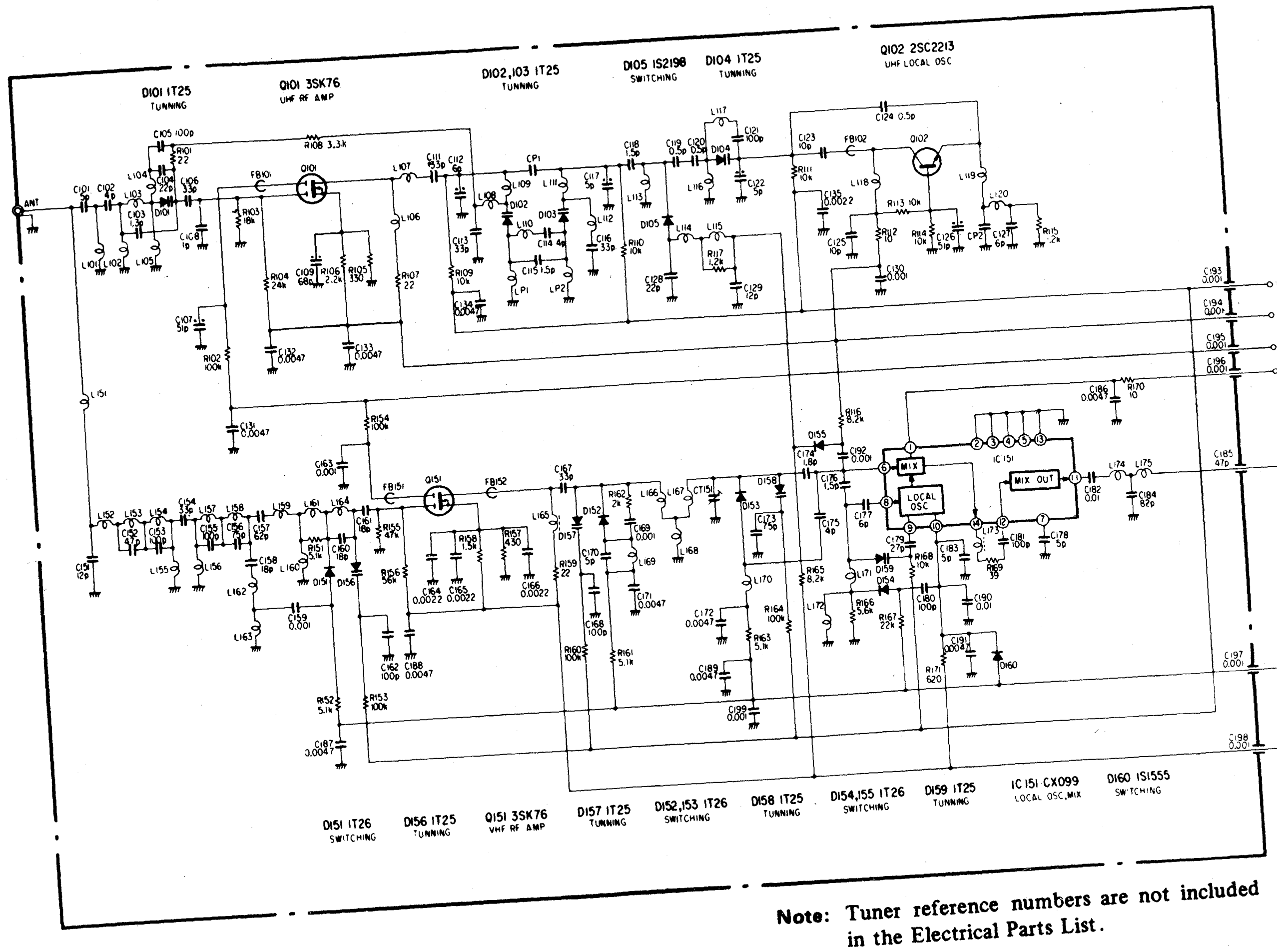
V09C


anode
cathode

TLG123A
TLO123
TLR123
TLR124
TLY123


long
short
anode
cathode

4-8. UHF AND VHF TUNER SCHEMATIC DIAGRAM
– BT-881 tuner –


D101 1T25
TUNNING
Q101 3SK76
UHF RF AMP
D102,103 1T25
TUNNING
D105 1S2198
SWITCHING
D104 1T25
TUNNING
Q102 2SC2213
UHF LOCAL OSC
ANT
VC
U
AGC
B
IF
Ⅱ
I
MIX
LOCAL OSC
MIX OUT
IC151
D151 1T26
SWITCHING
D156 1T25
TUNNING
Q151 3SK76
VHF RF AMP
D157 1T25
TUNNING
D152,153 1T26
SWITCHING
D158 1T25
TUNNING
D154,155 1T26
SWITCHING
D159 1T25
TUNNING
IC151 CX099
LOCAL OSC,MIX
D160 1S1555
SWITCHING

Note: Tuner reference numbers are not included in the Electrical Parts List.

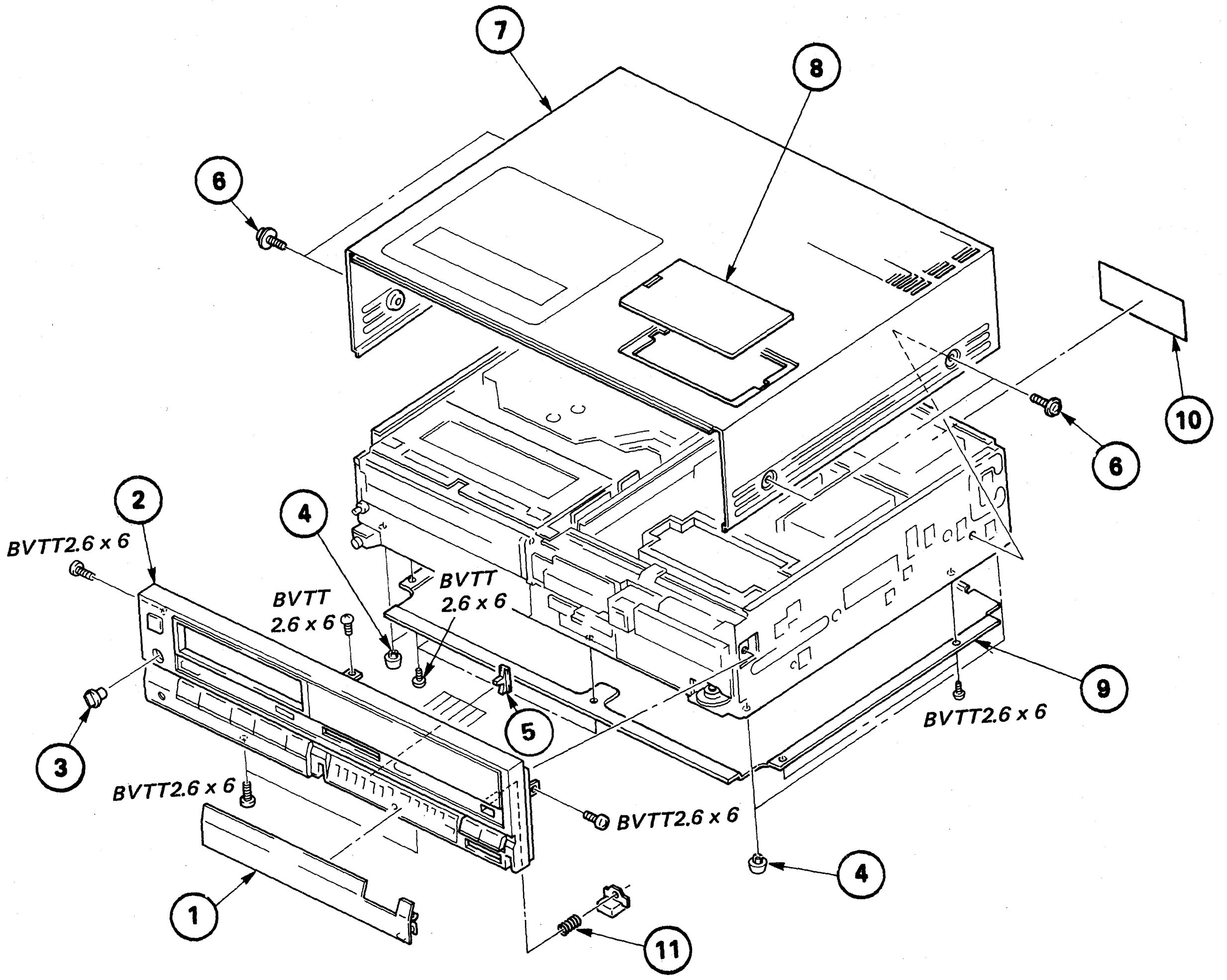
SECTION 5
EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

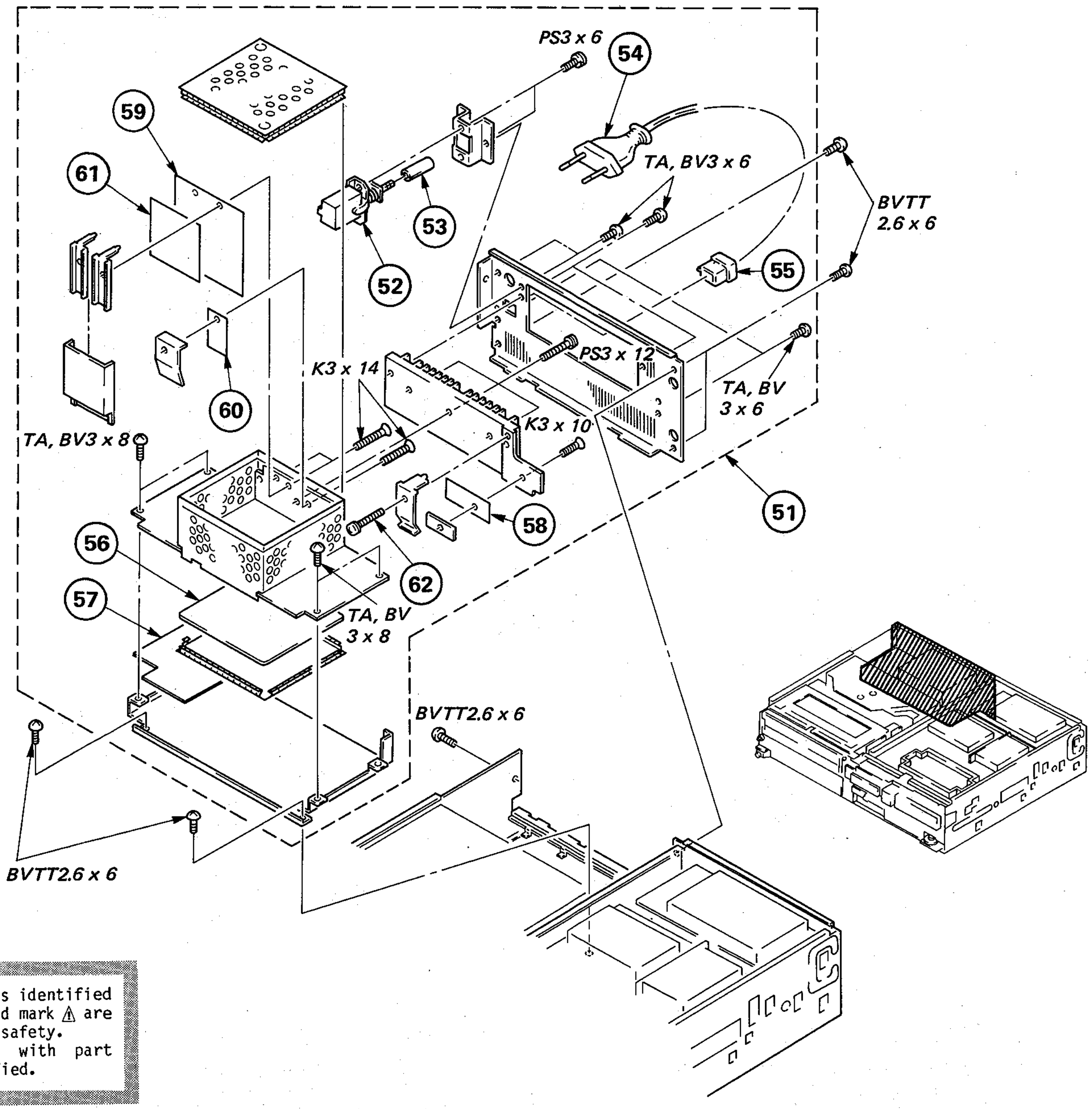
5-1. FRONT PANEL AND CABINET ASSEMBLY


1
2
3
4
5
6
7
8
9
10
11
BVTT2.6 x 6
BVTT 2.6 x 6
BVTT 2.6 x 6
BVTT2.6 x 6
BVTT2.6 x 6
BVTT2.6 x 6

No.	Part No.	Description	Remark
1	X-3684-004-1	DOOR ASSY, FRONT	
2	X-3684-007-1	PANEL ASSY, FRONT	5,11
3	3-684-013-01	KNOB, CONTROL	
4	3-670-155-11	LEG	
5	3-684-035-01	BUTTON, SLIDE	
6	3-703-354-01	SCREW (OS), CASE, CLAW	

No.	Part No.	Description	Remark
7	X-3684-006-3	CASE ASSY, UPPER	
8	3-681-218-41	DOOR, PRESET	
9	♠:3-684-056-02	PLATE, BOTTOM	
10	♠:3-684-057-01	LABEL, MODEL NUMBER	
11	4-864-435-00	SPRING, COMPRESSION	

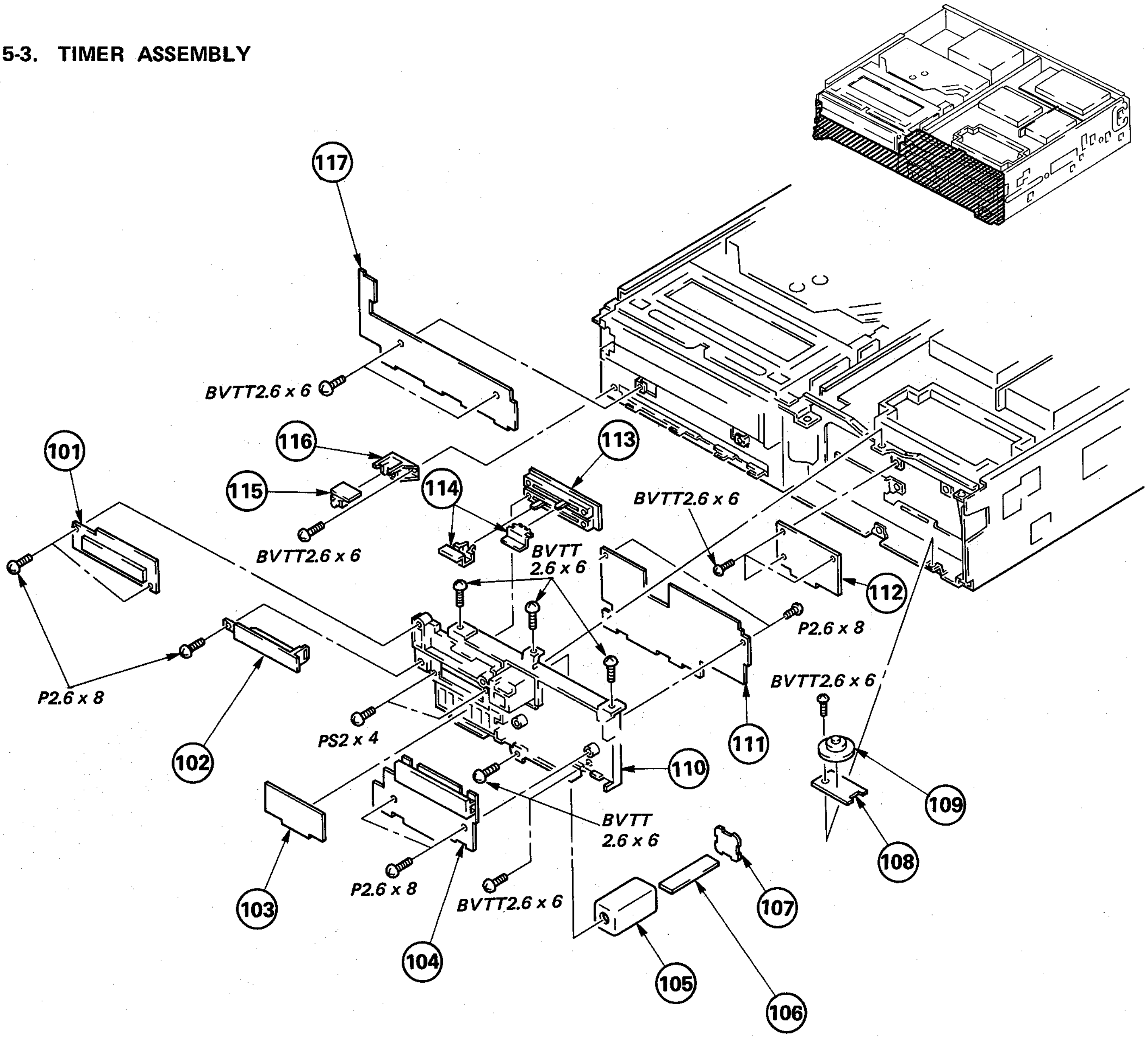
5-2. POWER ASSEMBLY


PS3 x 6
54
TA, BV3 x 6
BVTT 2.6 x 6
59
61
53
55
52
PS3 x 12
K3 x 14
TA, BV 3 x 6
60
K3 x 10
TA, BV3 x 8
51
58
56
62
57
TA, BV 3 x 8
BVTT2.6 x 6
BVTT2.6 x 6

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

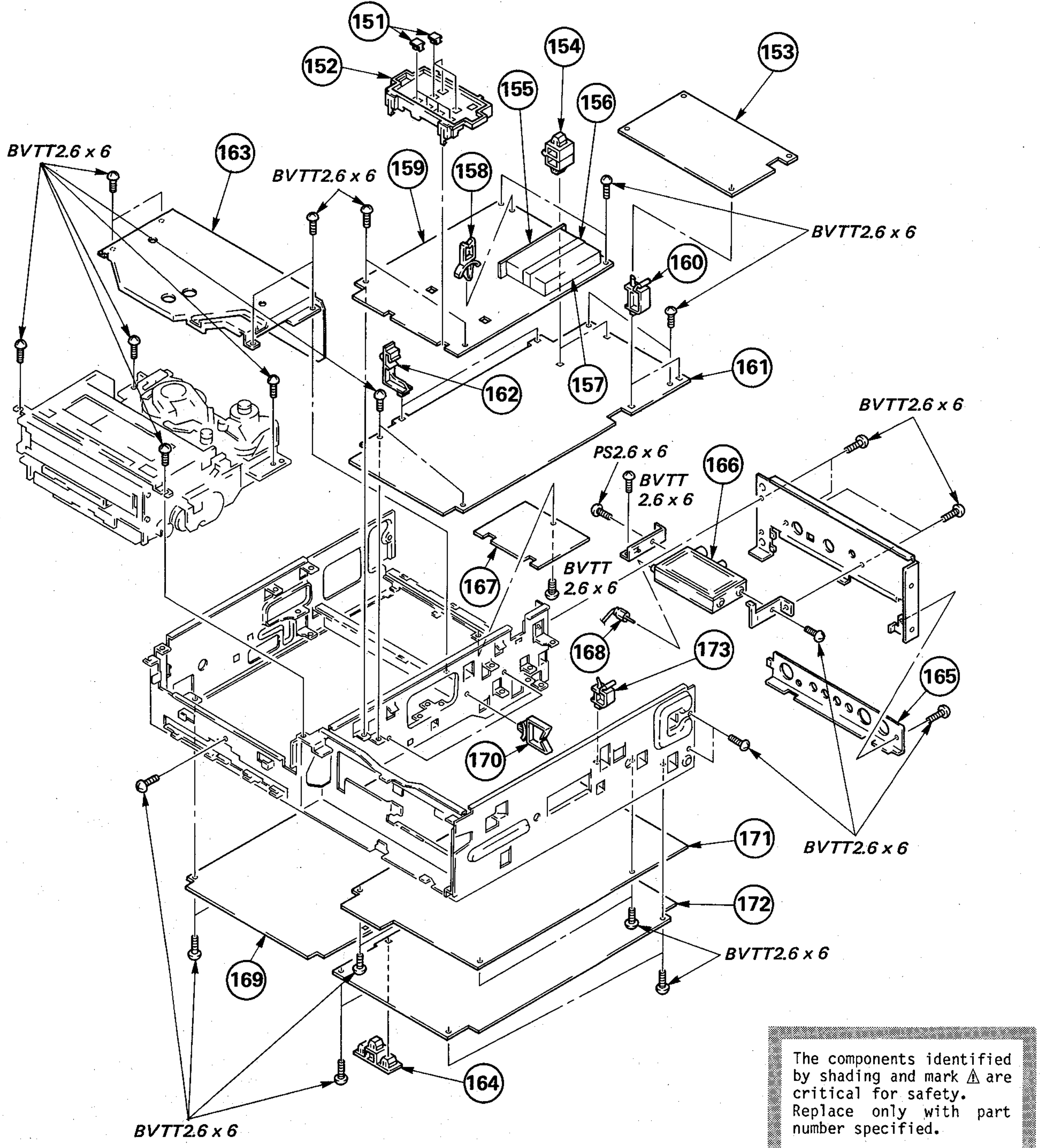
No.	Part No.	Description	Remark
51	⚠1-413-171-11	SWITCHING REGULATOR (SR-19E)	52-62
52	⚠1-552-903-12	PUSH SWITCH	S601
53	4-334-115-01	CLOCK-D-KNOB	
54	⚠1-534-817-31	POWER CORD	
55	⚠3-703-244-02	CODE-STOPPER	
56	⚠2-430-374-01	SHEET A, INSULATING	
57	⚠2-430-375-01	SHEET B, INSULATING	
58	2-430-383-01	RUBBER, INSULATING	
59	⚠2-430-342-01	RUBBER, INSULATING	
60	2-430-269-01	RUBBER, INSULATING	
61	2-430-209-01	RUBBER, INSULATING	
62	2-434-060-01	+M3x18	

5-3. TIMER ASSEMBLY


117
BVTT2.6 x 6
101
116
115
114
113
BVTT2.6 x 6
BVTT2.6 x 6
BVTT 2.6 x 6
112
P2.6 x 8
P2.6 x 8
BVTT2.6 x 6
111
PS2 x 4
102
110
109
BVTT 2.6 x 6
108
107
P2.6 x 8
BVTT2.6 x 6
103
104
105
106

No.	Part No.	Description	Remark
101	1-520-470-11	METER UNIT, LEVEL	
102	3-684-046-01	SCALE, DIAL	
103	♠:1-612-326-11	PC BOARD, SW-31	
104	♠:A-6728-996-A	MOUNTED PCB, TM-55	
105	♠:4-342-117-00	CASE, SHIELD (MAIN), R	
106	♠:1-606-794-00	PC BOARD, N	
107	♠:4-342-118-00	LID, SHIELD CASE, R	
108	♠:1-612-327-11	PC BOARD, TR-14	
109	3-684-012-01	KNOB, TRACK CONTROL	
110	♠:3-684-054-02	BRACKET, TM	
111	♠:A-6728-995-A	MOUNTED PCB, TM-54	
112	♠:1-612-330-11	PC BOARD, RL-18	
113	♠:1-612-325-11	PC BOARD, SV-12	
114	3-684-031-02	KNOB, REC SLIDE	
115	♠:1-612-324-11	PC BOARD, HP-7	
116	♠:3-684-029-03	HOLDER, HP	
117	♠:1-612-323-11	PC BOARD, FU-22	

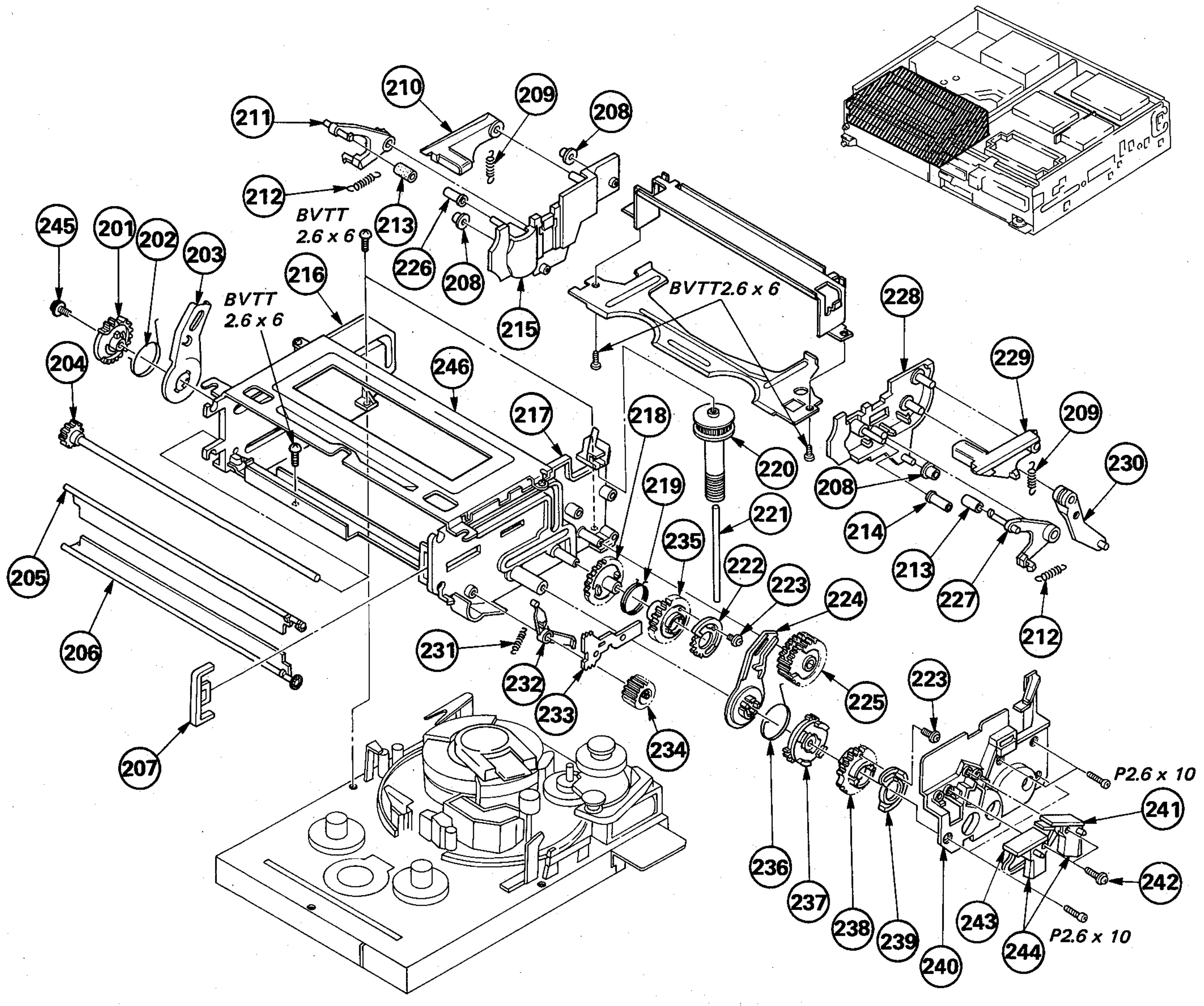
5-4. TUNER ASSEMBLY


151
152
154
153
155
156
BVTT2.6 x 6
163
BVTT2.6 x 6
159
158
BVTT2.6 x 6
160
161
162
157
BVTT2.6 x 6
PS2.6 x 6
BVTT 2.6 x 6
166
167
BVTT 2.6 x 6
168
173
165
170
171
BVTT2.6 x 6
172
BVTT2.6 x 6
169
164
BVTT2.6 x 6

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

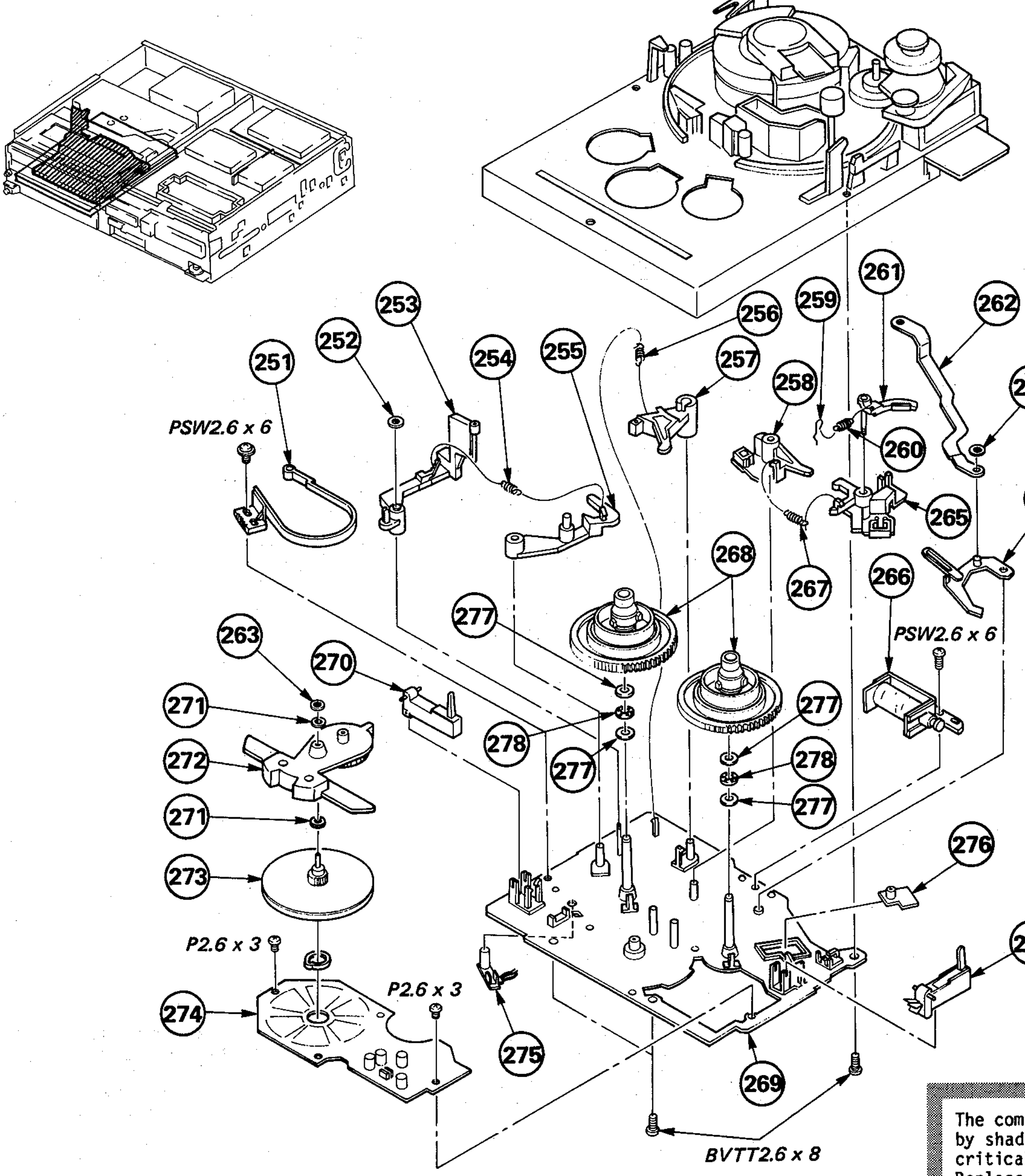
No.	Part No.	Description	Remark
151	3-662-243-00	BUTTON, PRESET	
152	3-684-047-01	COVER, PRESET	
153	♠:A-6713-203-A	COMPLETE PCB, AM-5	
154	♠:3-682-080-00	HINGE (A), PCB	
155	♠:1-610-400-00	PC BOARD, MT-4	
156	♠:3-681-220-00	BAND, RETAINER, TUNER	
157	⚠1-463-350-00	TUNER (BT-881)	
158	♠:3-644-407-00	CLIP, AC WIRE E	
159	♠:A-6721-201-A	COMPLETE PCB, TU-60	155,156,157
160	♠:3-682-047-01	HOLDER (A), PC BOARD	
161	♠:A-6713-200-A	COMPLETE PCB, AF-3	
162	♠:3-682-612-00	CLIP (B), ANCHOR	
163	♠:X-3684-017-1	COVER ASSY, DRUM	
164	♠:3-681-184-00	HOLDER, PC BOARD	
165	♠:3-681-114-21	PANEL, CONNECTOR	
166	⚠1-464-270-12	BOOSTER, RF MODULATOR(RFU-808E)	
167	♠:A-6023-241-A	COMPLETE PCB, PT-7	
168	♠:1-556-934-00	CABLE, PIN	
169	♠:A-6711-528-A	COMPLETE PCB, RP-17	
170	♠:3-655-214-00	CLIP, CABLE	
171	♠:A-6715-224-A	COMPLETE PCB, SS-28	
172	♠:A-6711-527-A	COMPLETE PCB, YC-28	
173	♠:3-675-530-00	SUPPORT, PC	

5-5. FRONT LOADING ASSEMBLY


210
209
208
211
212
213
BVTT
2.6 x 6
245
201
202
203
216
226
208
215
BVTT
2.6 x 6
BVTT2.6 x 6
228
246
229
204
217
218
209
220
230
219
208
221
214
235
222
213
205
223
224
227
212
231
206
232
225
223
233
234
207
P2.6 x 10
241
236
242
237
243
238
239
240
244
P2.6 x 10

No.	Part No.	Description	Remark
201	3-679-226-00	GEAR (LEFT), ARM, DRIVING	
202	3-679-145-00	SPRING (LEFT)	
203	3-679-220-00	ARM (LEFT), DRIVING	
204	X-3679-105-0	SHAFT ASSY, GEAR, MIDWAY	
205	3-679-222-05	DOOR, UPPER	
206	3-679-223-05	DOOR, LOWER	
207	3-679-137-00	HOLDER, OUTER DOOR	
208	3-679-143-00	ROLLER	
209	3-679-188-00	SPRING, TENSION	
210	3-679-132-00	LEVER (LEFT), PREVENTION	
211	3-679-130-00	LEVER (LEFT), RETAINER, CASSETTE	
212	3-679-288-00	SPRING, TENSION	
213	3-679-135-00	RUBBER, RETAINER, CASSETTE	
214	3-679-128-00	ROLLER (RIGHT), DRIVING	
215	♠:X-3679-107-0	PLATE ASSY, SIDE, BASE LEFT	
216	♠:3-679-266-00	PLATE, SIDE, LEFT	
217	♠:3-679-265-00	PLATE, SIDE, RIGHT	
218	3-679-217-04	GEAR (A), LIMITER	
219	3-679-139-00	SPRING	
220	3-679-215-00	GEAR, WORM	
221	3-679-123-00	SHAFT, GEAR, WORM	
222	3-679-124-00	CAM (CASSETTE OFF)	
223	3-669-480-21	+ PTPWH 2	
224	3-679-219-00	ARM (RIGHT), DRIVING	
225	3-679-216-00	WHEEL, WORM	
226	3-679-316-00	ROLLER (LEFT), DRIVING	
227	3-679-129-00	LEVER(RIGHT), RETAINER, CASSETTE	
228	♠:X-3679-106-0	PLATE ASSY, SIDE, BASE RIGHT	
229	3-679-131-00	LEVER (RIGHT), PREVENTION	
230	3-679-133-00	ARM, LID OPEN	
231	3-679-189-00	SPRING, TENSION	
232	3-679-134-00	ARM, SWITCHING, DOOR	
233	3-679-221-03	PLATE, RACK, SWITCHING, DOOR	
234	3-679-126-00	GEAR (RIGHT), MIDWAY	
235	3-679-218-00	GEAR (B), LIMITER	
236	3-679-144-00	SPRING (RIGHT)	
237	3-679-225-00	GEAR (RIGHT), ARM, DRIVING	
238	3-679-125-00	GEAR, DRIVING	
239	3-679-138-00	CAM (CASSETTE ON)	
240	♠:3-679-214-00	HOLDER, GEAR, WORM	
241	♠:1-609-227-11	PC BOARD, CS-3	
242	3-669-480-00	+ PTPWH 2	
243	♠:1-609-228-11	PC BOARD, CS-4	
244	1-554-241-00	SWITCH, LEVER	
245	3-683-421-01	SCREW (+ PTPWH)(2.6X8)	
246	♠:3-682-626-00	PLATE, TOP	

5-6. REEL TABLE ASSEMBLY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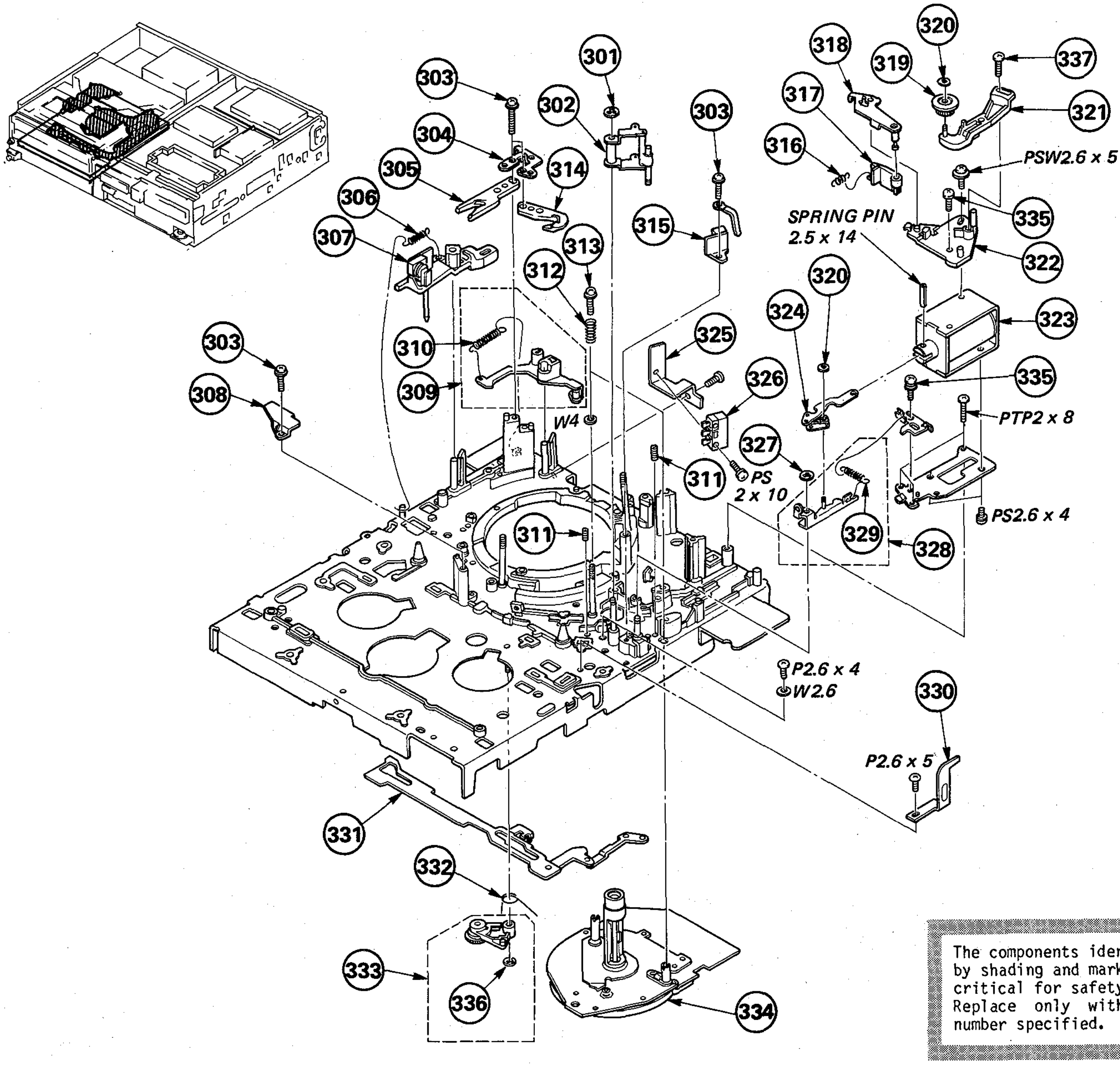
272
273
274
275
276
277
278
PSW2.6 x 6
PSW2.6 x 6
P2.6 x 3
P2.6 x 3
BVTT2.6 x 8

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark
251	X-3679-120-0	BAND ASSY, TENSION REGULATOR	
252	3-669-465-00	WASHER (1.5), STOPPER	
253	X-3679-122-0	LEVER ASSY, TENSION REGULATOR	
254	3-679-156-00	SPRING, TENSION	
255	♠:3-679-230-00	LEVER, FUNCTION	
256	3-679-151-00	SPRING, TENSION	
257	♠:3-679-231-00	LEVER, BRAKE, SOFT	
258	X-3679-117-0	BRAKE ASSY, S	
259	♠:3-681-163-00	HOOK, SPRING, REWIND	
260	3-681-156-00	SPRING, TENSION	
261	♠:X-3681-105-0	ARM ASSY, REWIND BRAKE	
262	♠:3-679-168-00	JOINT, BRAKE, L	
263	3-669-595-00	WASHER (2), STOPPER	
264	X-3679-119-0	ARM ASSY, STOPPER, PENDULUM	
265	X-3679-118-0	BRAKE ASSY, T	
266	⚠1-454-348-31	SOLENOID, BRAKE PLUNGER	PM901
267	3-679-190-00	SPRING, TENSION	
268	X-3681-104-0	TABLE ASSY, S REEL	
269	♠:X-3679-130-0	CHASSIS ASSY, SUB	
270	1-554-374-00	SWITCH, LEVER	S901, S902
271	3-679-318-00	WASHER, PENDULUM ARM	
272	A-6759-074-K	ARM BLOCK ASSY, PENDULUM	
273	X-2622-201-0	ROTOR ASSY, R	
274	♠:A-4910-021-A	MOUNTED PCB, R STATOR	M903
275	♠:1-610-401-00	PC BOARD, RD-6	
276	♠:1-610-402-00	PC BOARD, RD-7	
277	3-646-573-00	WASHER	
278	3-646-572-00	BEARING	

5-7. CHASSIS ASSEMBLY (1)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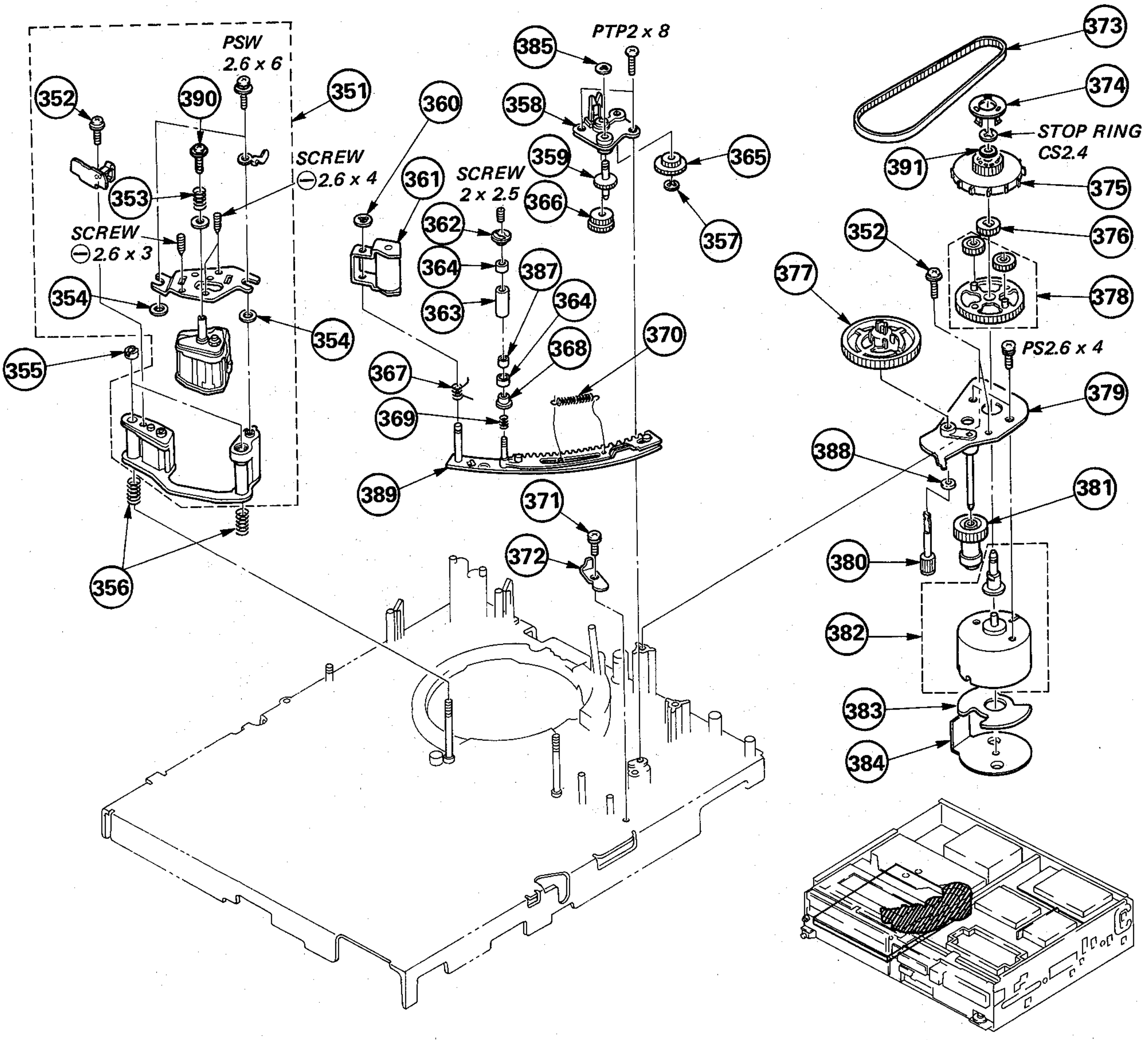
337
PSW2.6 x 5
SPRING PIN
2.5 x 14
PTP2 x 8
PS
2 x 10
PS2.6 x 4
P2.6 x 4
W2.6
P2.6 x 5
W4

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark
301	3-669-596-00	WASHER (2.3), STOPPER	
302	💧:X-3679-108-0	ARM ASSY, PRESS, PINCH	
303	3-669-480-11	+ PTPWH 2	
304	💧:3-672-540-00	PLATE, GROUND, TAPE GUIDE	
305	💧:3-669-618-00	PLATE (2), ADJUST	
306	3-679-164-00	SPRING, TENSION	
307	1-464-286-00	SENSOR, S COIL	L901
308	3-669-476-04	PLATE, GUIDE	
309	X-3679-149-0	ARM (B) ASSY, LOCK	310
310	3-679-323-00	SPRING, TENSION	
311	3-681-284-01	SCREW (-2.6X5) (S)	
312	3-679-359-00	SPRING, COMPRESSION	
313	3-669-633-00	SCREW, + PW2	
314	💧:3-672-507-00	PLATE (3-1), ADJUSTMENT	
315	1-464-250-00	SENSOR, T COIL	L902
316	3-508-108-XX	SPRING, TENSION	
317	💧:3-679-251-00	LIMITER, STOPPER	
318	💧:X-3679-123-0	ARM ASSY, STOPPER	
319	3-679-307-00	GEAR, TENSION	
320	3-669-465-00	WASHER (1.5), STOPPER	
321	💧:X-3679-145-0	ARM ASSY, CAR, TENSION	
322	💧:3-679-117-00	CHASSIS, ARM, STOPPER	
323	⚠1-454-365-21	SOLENOID, PLUNGER (PINCH)	PM902
324	X-3679-152-0	ARM (B) ASSY, PINCH SOLENOID	
325	💧:3-672-542-00	BRACKET, SWITCH, LE	
326	1-553-539-00	SWITCH, MICRO (LOADING END)	S903
327	3-669-595-00	WASHER (2), STOPPER	
328	💧:X-3669-379-0	ARM (P) ASSY, PINCH LIMITER	329
329	3-515-170-00	SPRING, TENSION	
330	💧:3-679-163-00	PLATE, LID OPEN	
331	X-3681-106-0	LEVER ASSY, SLIDE	
332	3-681-154-00	SPRING, TORSION	
333	X-3681-107-0	ARM ASSY, REVIEW BRAKE	336
334	8-838-048-01	MOTOR, DC (BHF-1908A)	M902
335	3-669-607-00	+PSW (SMALL ROUND) 2.6	
336	3-701-436-11	WASHER, 1.6	
337	3-681-231-00	SCREW (+PW 2.6X8), TAPPING	

5-8. CHASSIS ASSEMBLY (2)


PSW 2.6 x 6
351
352
390
353
SCREW ⊖2.6 x 4
SCREW ⊖2.6 x 3
354
354
355
356
360
361
SCREW 2 x 2.5
362
364
363
387
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367
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370
389
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385
PTP2 x 8
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374
STOP RING CS2.4
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PS2.6 x 4
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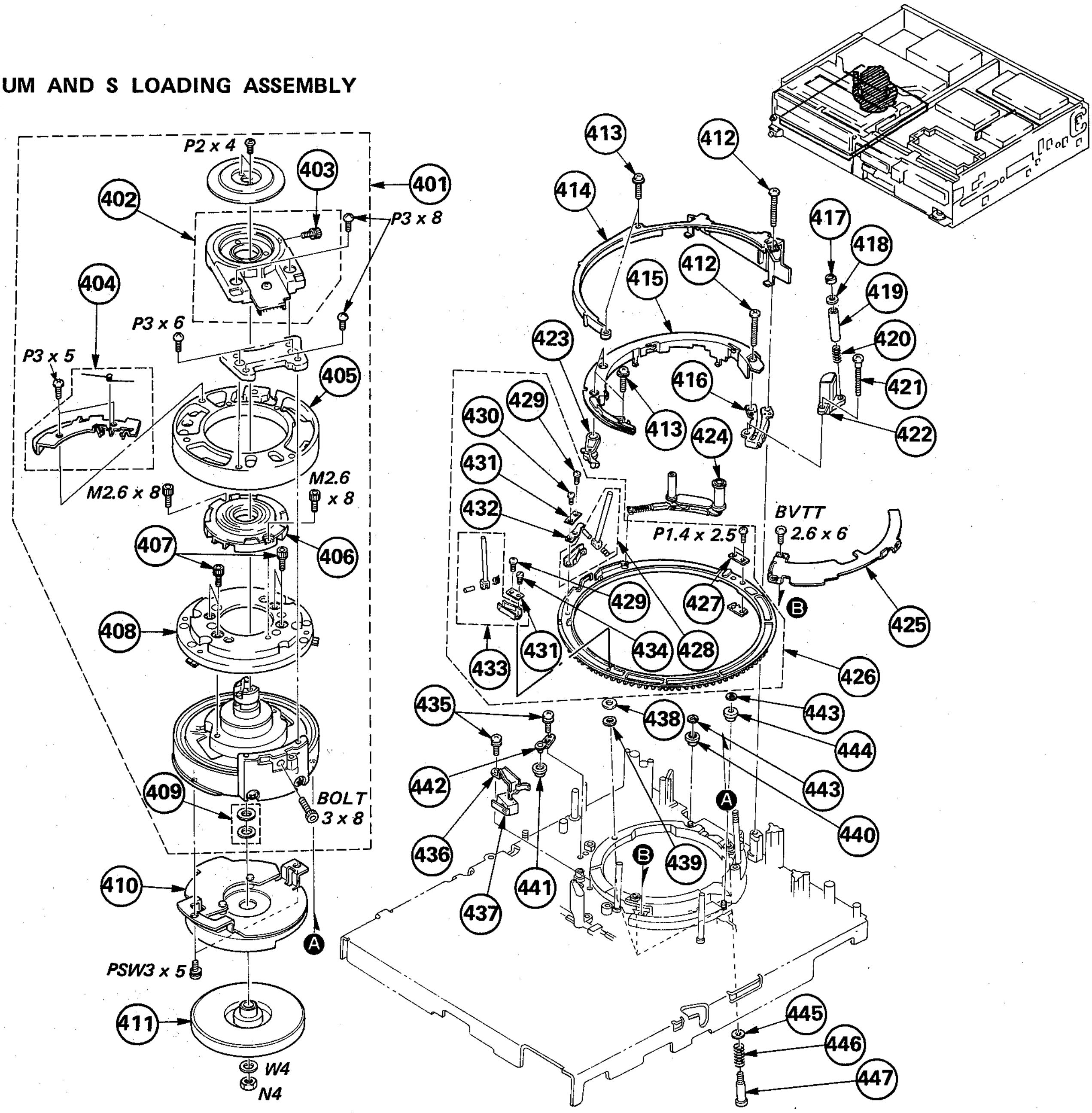
No.	Part No.	Description	Remark
351	A-6761-060-A	ACE ASSY	352,353,354,390
352	3-669-480-11	+ PTPWH 2	
353	🌢:3-669-316-00	SPRING, COMPRESSION	
354	3-669-598-00	WASHER, CTL	
355	3-669-318-00	NUT, ADJUSTMENT, GUIDE	
356	3-669-317-00	SPRING, COMPRESSION	
357	3-669-465-00	WASHER (1.5), STOPPER	
358	X-3679-147-0	CHASSIS (B) ASSY, DRIVE GEAR	
359	X-3679-148-0	GEAR (F) ASSY (B)	
360	3-669-596-00	WASHER (2.3), STOPPER	
361	X-3679-264-1	ARM ASSY, PINCH ROLLER	
362	3-669-431-00	FLANGE (UPPER), GUIDE	
363	3-669-438-11	ROLLER (#9), GUIDE	
364	3-669-443-00	BEARING, BALL (NO FLANGE)	
365	3-669-337-00	GEAR (D)	
366	3-669-338-00	GEAR (E)	
367	3-683-441-01	SPRING	
368	3-669-432-00	FLANGE (LOWER), GUIDE	
369	3-669-452-00	SPRING, COMPRESSION	
370	3-549-014-00	SPRING, TENSION	
371	3-669-607-31	+PSW (SMALL ROUND) (2.6)	
372	🌢:3-679-165-00	STOPPER, SLIDER	
373	3-679-119-00	BELT, SYNCHRO	
374	3-679-140-00	FLANGE, GEAR, INTERNAL	
375	3-679-101-00	GEAR, INTERNAL	
376	3-679-104-05	GEAR	
377	3-679-115-00	GEAR (LARGE), LOADING	
378	X-3679-111-0	CARRIER ASSY	
379	🌢:X-3679-112-0	CHASSIS ASSY, GEAR, PLANET	
380	3-679-114-00	GEAR (SMALL), LOADING	
381	X-3669-321-0	GEAR (C) ASSY	
382	X-3679-268-1	MOTOR ASSY, L	M904
383	🌢:1-605-071-00	PC BOARD, LM-8	
384	🌢:3-669-613-00	INSULATOR, L MOTOR	
385	3-669-595-00	WASHER (2), STOPPER	
387	3-657-841-31	SPACER (2X2.5)	
388	3-701-439-11	WASHER	
389	🌢:X-3679-265-1	SLIDER ASSY (2), T	
390	3-679-362-00	SCREW (M2X4), PAN	
391	3-683-454-01	WASHER, POLYETHYLENE	

5-9. DRUM AND S LOADING ASSEMBLY


P2 x 4
403
401
402
P3 x 8
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P3 x 6
P3 x 5
405
M2.6 x 8
M2.6 x 8
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BOLT 3 x 8
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PSW3 x 5
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BVTT 2.6 x 6
P1.4 x 2.5
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No.	Part No.	Description	Remark
401	A-6050-233-A	DRUM ASSY (DSH-48A-R)	402,404-409
402	A-6050-237-A	GUIDE ARM ASSY	403
403	3-681-360-01	BOLT, HEX, SOCKET (WASHER) 2.6x8	
404	A-6760-066-B	SPRING ASSY, TAPE RETAINER	
405	A-6760-178-A	DRUM ASSY, UPPER	
406	X-3681-312-1	ROTARY COUPLER ASSY	
407	3-669-157-00	BOLT (WASHER)(2.6x8)	
408	A-6762-165-A	DISK ASSY (DSR-48-R)	
409	X-3669-105-0	SPACER BLOCK ASSY	
410	X-2621-204-0	STATOR ASSY, D	
411	X-2621-202-0	ROTOR ASSY, D	
412	3-669-466-21	SCREW (M 2.6)	
413	3-669-480-11	+ PTPWH 2	
414	♠:3-669-585-00	GUIDE (2), SHUTTLE	
415	♠:3-679-290-00	GUIDE (1-YA), SHUTTLE	
416	♠:X-3679-263-1	BASE ASSY, SLANT	
417	3-669-446-00	NUT, GUIDE, NO. 6	
418	3-679-910-00	FLANGE (S), GUIDE, NUMBER 6	
419	3-669-445-00	SPACER, GUIDE, NO. 6	
420	3-669-615-00	SPRING, COMPRESSION	
421	3-669-606-00	SCREW (2.6)	
422	8-825-508-10	HEAD, FE (FULL ERASE)	
423	X-3669-327-0	ARM ASSY, SWITCH, ULE	
424	A-6750-158-A	SHUTTLE (2) BLOCK ASSY	
425	♠:3-669-477-00	LINER, LINK, PIN	
426	X-3679-150-0	RING (YA) ASSY, S LOADING	427-434
427	♠:3-669-616-00	RETAINER	
428	♠:X-3669-430-0	HOLDER BLOCK ASSY, #3 GUIDE	
429	3-669-478-00	SCREW (1X3), TAPPING	
430	3-669-479-11	SCREW (1.4X3.5), TAPPING	
431	♠:3-669-472-02	RETAINER, SPRING, LEAF	
432	3-672-583-00	SPRING	
433	♠:X-3669-429-0	HOLDER BLOCK ASSY, #2 GUIDE	
434	3-672-586-00	SCREW (1.4X3), TAPPING	
435	3-669-607-31	+PSW (SMALL ROUND) (2.6)	
436	♠:3-669-355-00	HOLDER, SWITCH, ULE	
437	1-553-718-00	SWITCH, MICRO (UNLOADING END)	S904
438	3-669-646-00	SPACER, DRUM	
439	3-669-646-11	SPACER, DRUM	
440	3-669-630-00	ROLLER (C), RING	
441	3-669-360-00	ROLLER, RING	
442	♠:X-3669-329-0	PLATE ASSY, ADJUSTMENT	
443	3-669-465-00	WASHER (1.5), STOPPER	
444	3-669-597-00	ROLLER (B), RING	
445	3-669-600-11	WASHER, FLAT (3.5)	
446	3-429-123-00	SPRING	
447	3-669-302-00	SCREW, FITTING	

5-10. HARDWARE LIST

SCREW

7-621-259-32	SCREW +P 2.6X5
7-621-259-35	SCREW +P 2.6X5
7-621-759-35	+PSW, 2.6X5
7-621-759-45	+PSW, 2.6X6
7-627-551-08	SCREW, PRECISION +P 1.4X1.6
7-627-551-28	SCREW, PRECISION +P 1.4X2.5
7-627-552-38	SCREW, PRECISION +P 1.7X3
7-628-253-05	SCREW +PS 2X4
7-628-253-45	SCREW +PS 2X10
7-628-253-95	SCREW +PS 2.6X4
7-628-254-15	SCREW +PS 2.6X6
7-685-134-11	SCREW +P 2.6X8 TYPE2 NON-SLIT
7-685-134-21	SCREW +P 2.6X8 TYPE2 SLIT
7-685-135-11	SCREW +P 2.6X10 TYPE2 NON-SLIT
7-685-534-11	SCREW +BTP 2.6X8 TYPE2 N-S
7-685-791-01	SCREW +PTT 2.6X5 (S)
7-685-861-09	SCREW +BVTT 2.6X5 (S)
7-685-862-01	SCREW +BVTT 2.6X6 (S)
7-685-871-01	SCREW +BVTT 3X6 (S)

SET-SCREW

7-621-712-26	SET-SCREW, SLOT 2.6X3FLAT POINT
7-621-712-35	SET-SCREW, SLOT 2.6X4CONE POINT
7-621-712-46	SET-SCREW, SLOT 2.6X5FLAT POINT

NUT

7-622-205-05	N 2, TYPE 2

RING

7-624-118-01	RING, RETAINING E-2.5
7-624-190-61	STOP RING 2.4, TYPE-CS

SPRING PIN

7-626-302-31	SPRING PIN, 2.5X14

FILM

7-632-658-01	FILM

TAPPING

7-685-105-11	TPG +P 2X8, TYPE 2, NON-SLIT

WASHER

7-688-002-11	W 2.6, MIDDLE
7-688-004-01	W 4, SMALL

SECTION 6
ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : μF, PF : μμF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : μH

♠:A-4910-021-B R STATOR (REEL MOTOR) BOARD, COMPLETE
****

Ref.No	Part No.	Description				Remark
	♠:1-560-460-00	PIN, CONNECTOR 4P				
		CAPACITOR				
C1	1-123-821-00	ELECT	47MF	20%	16V	
C2	1-123-821-00	ELECT	47MF	20%	16V	
C3	1-123-821-00	ELECT	47MF	20%	16V	
C4	1-123-821-00	ELECT	47MF	20%	16V	
		DIODE				
D1	8-719-941-48	DIODE 1N4148TP				
		IC				
IC1	8-759-108-77	IC CX877				
		TRANSISTOR				
Q1	8-729-100-01	TRANSISTOR 2SD992				
Q2	8-729-100-01	TRANSISTOR 2SD992				
Q3	8-729-100-01	TRANSISTOR 2SD992				
Q4	8-729-100-01	TRANSISTOR 2SD992				
Q5	8-729-100-01	TRANSISTOR 2SD992				
Q6	8-729-100-01	TRANSISTOR 2SD992				
		RESISTOR				
R1	1-247-823-00	CARBON	470	5%	1/6W	
R2	1-247-823-00	CARBON	470	5%	1/6W	
R3	1-247-823-00	CARBON	470	5%	1/6W	
R4	1-247-829-00	CARBON	820	5%	1/6W	
R5	1-247-871-00	CARBON	47K	5%	1/6W	
R6	1-247-871-00	CARBON	47K	5%	1/6W	
R7	1-247-871-00	CARBON	47K	5%	1/6W	
R8	1-247-871-00	CARBON	47K	5%	1/6W	
		DIODE				
S1	8-719-810-31	DIODE THS103-1				
S2	8-719-810-31	DIODE THS103-1				

♠:A-6023-241-A PT-7 BOARD, COMPLETE
****

Ref.No	Part No.	Description				Remark
	♠:3-684-037-01	HEAT SINK, PT				
	7-621-770-87	SCREW +B 2.6X5				
		CAPACITOR				
C001	1-123-356-00	ELECT	10MF	20%	16V	
C002	1-123-356-00	ELECT	10MF	20%	16V	
C003	1-101-006-00	CERAMIC	0.047MF		50V	
C004	1-123-380-00	ELECT	1MF	20%	50V	
C005	1-101-888-00	CERAMIC	68PF	5%	50V	
C006	1-101-888-00	CERAMIC	68PF	5%	50V	
C007	1-123-308-00	ELECT	220MF	20%	10V	
C008	1-123-308-00	ELECT	220MF	20%	10V	
C009	1-123-322-00	ELECT	330MF	20%	16V	
C010	1-123-839-00	ELECT	1000MF	20%	16V	
		CONNECTOR				
CN002	♠:1-560-891-00	PIN, CONNECTOR 3P				
CN003	♠:1-560-891-00	PIN, CONNECTOR 3P				
CN004	♠:1-560-894-00	PIN, CONNECTOR 6P				
		DIODE				
D001	8-719-911-19	DIODE 1SS119				
		IC				
IC001	8-759-745-56	IC NJM4556D				
		TRANSISTOR				
Q001	8-729-316-16	TRANSISTOR 2SC1061				
Q002	8-729-316-16	TRANSISTOR 2SC1061				
Q003	8-729-178-54	TRANSISTOR 2SC2785				
		RESISTOR				
R001	1-247-866-00	CARBON	30K	5%	1/6W	
R002	1-247-866-00	CARBON	30K	5%	1/6W	
R003	1-247-866-00	CARBON	30K	5%	1/6W	
R004	1-247-866-00	CARBON	30K	5%	1/6W	
R005	1-247-871-00	CARBON	47K	5%	1/6W	
R006	1-247-871-00	CARBON	47K	5%	1/6W	
R007	1-247-831-00	CARBON	1K	5%	1/6W	
R008	1-247-831-00	CARBON	1K	5%	1/6W	
R009	1-247-801-00	CARBON	56	5%	1/6W	
R010	1-247-801-00	CARBON	56	5%	1/6W	
R011	1-247-831-00	CARBON	1K	5%	1/6W	

****

♠:A-6711-527-A YC-28 BOARD, COMPLETE
****

Ref.No	Part No.	Description	Remark
	1-536-796-21	TERMINAL BOARD, CONTROL PANEL	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
		FILTER BAND PASS			
BPF001	1-235-098-00	FILTER, BAND PASS			
		CAPACITOR			
C001	1-123-356-00	ELECT	10MF	20%	16V
C002	1-123-356-00	ELECT	10MF	20%	16V
C003	1-123-356-00	ELECT	10MF	20%	16V
C004	1-123-356-00	ELECT	10MF	20%	16V
C005	1-123-356-00	ELECT	10MF	20%	16V
C006	1-123-356-00	ELECT	10MF	20%	16V
C007	1-101-004-00	CERAMIC	0.01MF		50V
C008	1-123-332-00	ELECT	47MF	20%	16V
C009	1-123-311-00	ELECT	1000MF	20%	10V
C010	1-123-356-00	ELECT	10MF	20%	16V
C011	1-123-356-00	ELECT	10MF	20%	25V
C013	1-123-306-00	ELECT	47MF	20%	10V
C014	1-123-381-00	ELECT	2.2MF	20%	50V
C015	1-123-306-00	ELECT	47MF	20%	10V
C016	1-108-589-00	MYLAR	0.027MF	5%	50V
C017	1-101-004-00	CERAMIC	0.01MF		50V
C018	1-123-306-00	ELECT	47MF	20%	10V
C019	1-101-004-00	CERAMIC	0.01MF		50V
C020	1-101-004-00	CERAMIC	0.01MF		50V
C021	1-101-004-00	CERAMIC	0.01MF		50V
C022	1-101-004-00	CERAMIC	0.01MF		50V
C023	1-101-882-00	CERAMIC	51PF	5%	50V
C024	1-130-047-00	FILM	180PF	5%	50V
C025	1-108-555-00	MYLAR	0.001MF	5%	50V
C026	1-101-059-00	CERAMIC	510PF	5%	50V
C027	1-161-007-00	CERAMIC	0.0033MF	10%	25V
C028	1-108-555-00	MYLAR	0.001MF	5%	50V
C029	1-123-354-00	ELECT	3.3MF	20%	50V
C031	1-101-004-00	CERAMIC	0.01MF		50V
C032	1-102-816-00	CERAMIC	120PF	5%	50V
C033	1-101-004-00	CERAMIC	0.01MF		50V
C034	1-101-004-00	CERAMIC	0.01MF		50V
C035	1-102-816-00	CERAMIC	120PF	5%	50V
C036	1-101-882-00	CERAMIC	51PF	5%	50V
C037	1-101-004-00	CERAMIC	0.01MF		50V
C038	1-101-004-00	CERAMIC	0.01MF		50V
C039	1-101-004-00	CERAMIC	0.01MF		50V
C040	1-101-004-00	CERAMIC	0.01MF		50V
C041	1-161-005-00	CERAMIC	0.0022MF	10%	25V
C042	1-102-516-00	CERAMIC	27PF	5%	50V
C043	1-101-004-00	CERAMIC	0.01MF		50V
C044	1-101-004-00	CERAMIC	0.01MF		50V
C045	1-102-523-00	CERAMIC	56PF	5%	50V
C046	1-101-004-00	CERAMIC	0.01MF		50V
C047	1-101-004-00	CERAMIC	0.01MF		50V
C048	1-101-004-00	CERAMIC	0.01MF		50V
C049	1-101-004-00	CERAMIC	0.01MF		50V
C050	1-102-865-00	CERAMIC	8PF	0.5PF	50V
C051	1-102-525-00	CERAMIC	68PF	5%	50V
C052	1-102-525-00	CERAMIC	68PF	5%	50V
C053	1-123-380-00	ELECT	1MF	20%	50V
C054	1-161-002-00	CERAMIC	0.0012MF	10%	25V
C055	1-123-380-00	ELECT	1MF	20%	50V
C056	1-102-962-00	CERAMIC	30PF	5%	50V
C057	1-102-981-00	CERAMIC	300PF	5%	50V
C058	1-123-306-00	ELECT	47MF	20%	10V
C059	1-101-004-00	CERAMIC	0.01MF		50V
C060	1-108-579-00	MYLAR	0.01MF	5%	50V
C061	1-123-354-00	ELECT	3.3MF	20%	50V
C062	1-123-306-00	ELECT	47MF	20%	10V
C063	1-101-004-00	CERAMIC	0.01MF		50V
C064	1-102-521-00	CERAMIC	43PF	5%	50V
C065	1-102-852-00	CERAMIC	47PF	5%	50V
C066	1-102-852-00	CERAMIC	47PF	5%	50V
C067	1-161-772-00	CERAMIC	0.1MF		25V
C068	1-101-004-00	CERAMIC	0.01MF		50V
C069	1-102-962-00	CERAMIC	30PF	5%	50V
C070	1-101-004-00	CERAMIC	0.01MF		50V
C071	1-123-380-00	ELECT	1MF	20%	50V
C072	1-101-004-00	CERAMIC	0.01MF		50V
C073	1-102-525-00	CERAMIC	68PF	5%	50V
C074	1-102-525-00	CERAMIC	68PF	5%	50V
C075	1-101-004-00	CERAMIC	0.01MF		50V
C076	1-102-951-00	CERAMIC	15PF	5%	50V
C077	1-123-356-00	ELECT	10MF	20%	16V
C078	1-123-356-00	ELECT	10MF	20%	16V
C080	1-101-004-00	CERAMIC	0.01MF		50V
C082	1-161-024-00	CERAMIC	0.082MF	10%	25V
C083	1-102-977-00	CERAMIC	200PF	5%	50V
C084	1-123-328-00	ELECT	4.7MF	20%	25V
C085	1-101-004-00	CERAMIC	0.01MF		50V
C086	1-108-557-00	MYLAR	0.0012MF	5%	50V
C087	1-161-019-00	CERAMIC	0.033MF	10%	25V
C088	1-101-361-00	CERAMIC	150PF	5%	50V
C092	1-101-004-00	CERAMIC	0.01MF		50V
C093	1-101-006-00	CERAMIC	0.047MF		50V
C095	1-102-976-00	CERAMIC	180PF	5%	50V
C096	1-102-824-00	CERAMIC	470PF	5%	50V
C097	1-102-823-00	CERAMIC	43PF	5%	50V
C098	1-102-820-00	CERAMIC	330PF	5%	50V
C099	1-102-851-00	CERAMIC	15PF	5%	50V
C100	1-161-025-00	CERAMIC	0.1MF	10%	25V
C101	1-108-595-00	MYLAR	0.047MF	5%	50V
C102	1-161-005-00	CERAMIC	0.0022MF	10%	25V
C103	1-108-555-00	MYLAR	0.001MF	5%	50V
C104	1-102-977-00	CERAMIC	200PF	5%	50V
C105	1-102-973-00	CERAMIC	100PF	5%	50V
C106	1-123-356-00	ELECT	10MF	20%	16V
C107	1-161-025-00	CERAMIC	0.1MF	10%	25V
C108	1-101-004-00	CERAMIC	0.01MF		50V
C109	1-101-004-00	CERAMIC	0.01MF		50V

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description			Remark
C110	1-123-306-00	ELECT	47MF	20%	10V
C111	1-101-882-00	CERAMIC	51PF	5%	50V
C112	1-101-004-00	CERAMIC	0.01MF		50V
C113	1-101-006-00	CERAMIC	0.047MF		50V
C114	1-101-880-00	CERAMIC	47PF	5%	50V
C116	1-101-004-00	CERAMIC	0.01MF		50V
C117	1-101-361-00	CERAMIC	150PF		50V
C118	1-101-004-00	CERAMIC	0.01MF		50V
C119	1-123-306-00	ELECT	47MF	20%	10V
C120	1-101-004-00	CERAMIC	0.01MF		50V
C121	1-101-004-00	CERAMIC	0.01MF		50V
C122	1-101-004-00	CERAMIC	0.01MF		50V
C123	1-101-004-00	CERAMIC	0.01MF		50V
C124	1-102-948-00	CERAMIC	11PF	5%	50V
C125	1-123-330-00	ELECT	22MF	20%	16V
C127	1-123-318-00	ELECT	33MF	20%	16V
C128	1-123-330-00	ELECT	22MF	20%	16V
C129	1-123-330-00	ELECT	22MF	20%	16V
C130	1-123-356-00	ELECT	10MF	20%	16V
C131	1-123-380-00	ELECT	1MF	20%	50V
C132	1-123-328-00	ELECT	4.7MF	20%	25V
C133	1-102-851-00	CERAMIC	15PF	5%	50V
C134	1-102-821-00	CERAMIC	360PF	5%	50V
C135	1-102-823-00	CERAMIC	43PF	5%	50V
C136	1-102-976-00	CERAMIC	180PF	5%	50V
C137	1-102-513-00	CERAMIC	18PF	5%	50V
C138	1-102-529-00	CERAMIC	100PF	5%	50V
C139	1-102-529-00	CERAMIC	100PF	5%	50V
C140	1-102-519-00	CERAMIC	36PF	5%	50V
C141	1-102-529-00	CERAMIC	100PF	5%	50V
C142	1-123-328-00	ELECT	4.7MF	20%	25V
C144	1-102-511-00	CERAMIC	13PF	5%	50V
C145	1-102-522-00	CERAMIC	51PF	5%	50V
C146	1-102-522-00	CERAMIC	51PF	5%	50V
C147	1-102-511-00	CERAMIC	13PF	5%	50V
C148	1-101-006-00	CERAMIC	0.047MF		50V
C155	1-101-004-00	CERAMIC	0.01MF		50V
C156	1-101-004-00	CERAMIC	0.01MF		50V
C157	1-102-981-00	CERAMIC	300PF	5%	50V
C158	1-102-948-00	CERAMIC	11PF	5%	50V
C159	1-102-822-00	CERAMIC	390PF	5%	50V
C178	1-123-330-00	ELECT	22MF	20%	16V
C179	1-123-356-00	ELECT	10MF	20%	16V
C180	1-123-332-00	ELECT	47MF	20%	16V
C181	1-108-569-00	MYLAR	0.0039MF	5%	50V
C182	1-123-356-00	ELECT	10MF	20%	16V
C183	1-101-006-00	CERAMIC	0.047MF		50V
C184	1-123-332-00	ELECT	47MF	20%	16V
C185	1-123-333-00	ELECT	100MF	20%	16V
C186	1-101-004-00	CERAMIC	0.01MF		50V
C187	1-123-330-00	ELECT	22MF	20%	16V
C188	1-161-025-00	CERAMIC	0.1MF	10%	25V
C189	1-123-356-00	ELECT	10MF	20%	16V
C190	1-123-311-00	ELECT	1000MF	20%	10V
C191	1-101-004-00	CERAMIC	0.01MF		50V
C192	1-123-328-00	ELECT	4.7MF	20%	25V
C196	1-123-380-00	ELECT	1MF	20%	50V
C197	1-123-356-00	ELECT	10MF	20%	16V
C198	1-102-980-00	CERAMIC	270PF	5%	50V
C200	1-101-004-00	CERAMIC	0.01MF		50V
C201	1-123-356-00	ELECT	10MF	20%	16V
C202	1-101-004-00	CERAMIC	0.01MF		50V
C203	1-101-004-00	CERAMIC	0.01MF		50V
C204	1-123-328-00	ELECT	4.7MF	20%	25V
C206	1-101-004-00	CERAMIC	0.01MF		50V
C207	1-161-025-00	CERAMIC	0.1MF	10%	25V
C208	1-123-356-00	ELECT	10MF	20%	16V
C211	1-123-356-00	ELECT	10MF	20%	16V
C212	1-123-333-00	ELECT	100MF	20%	16V
C214	1-123-356-00	ELECT	10MF	20%	16V
C215	1-123-330-00	ELECT	22MF	20%	16V
C217	1-161-025-00	CERAMIC	0.1MF	10%	25V
C230	1-124-475-11	ELECT	470MF	20%	16V
C241	1-161-772-00	CERAMIC	0.1MF	10%	25V
C243	1-161-772-00	CERAMIC	0.1MF	10%	25V
C244	1-101-006-00	CERAMIC	0.047MF		50V
C245	1-101-006-00	CERAMIC	0.047MF		50V
C246	1-161-772-00	CERAMIC	0.1MF	10%	25V
C247	1-123-320-00	ELECT	100MF	20%	16V
C401	1-123-381-00	ELECT	2.2MF	20%	50V
C402	1-101-001-00	CERAMIC	0.001MF		50V
C403	1-101-001-00	CERAMIC	0.001MF		50V
C404	1-101-004-00	CERAMIC	0.01MF		50V
C405	1-123-330-00	ELECT	22MF	20%	16V
C406	1-123-330-00	ELECT	22MF	20%	16V
C407	1-102-962-00	CERAMIC	30PF	5%	50V
C408	1-101-888-00	CERAMIC	68PF	5%	50V
C409	1-123-381-00	ELECT	2.2MF	20%	50V
C410	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C411	1-101-005-00	CERAMIC	0.022MF		50V
C412	1-123-318-00	ELECT	33MF	20%	16V
C414	1-123-318-00	ELECT	33MF	20%	16V
C415	1-123-356-00	ELECT	10MF	20%	16V
C416	1-102-948-00	CERAMIC	11PF	5%	50V
C417	1-102-948-00	CERAMIC	11PF	5%	50V
C418	1-102-965-00	CERAMIC	39PF	5%	50V
C419	1-123-356-00	ELECT	10MF	20%	16V
C420	1-123-328-00	ELECT	4.7MF	20%	25V
C421	1-101-006-00	CERAMIC	0.047MF		50V
C501	1-101-004-00	CERAMIC	0.01MF		50V
C502	1-101-004-00	CERAMIC	0.01MF		50V
C503	1-101-004-00	CERAMIC	0.01MF		50V
C504	1-101-005-00	CERAMIC	0.022MF		50V
C505	1-102-822-00	CERAMIC	390PF	5%	50V
C506	1-101-006-00	CERAMIC	0.047MF		50V
C507	1-123-318-00	ELECT	33MF	20%	16V

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
		FILTER	
CF001	1-527-998-00	FILTER, CERAMIC	
CF002	1-527-875-00	FILTER, CERAMIC	
CF003	1-527-849-00	FILTER, CERAMIC	
		CONNECTOR	
CN001	🌢:1-564-035-11	PIN, CONNECTOR 10P	
CN003	🌢:1-560-891-00	PIN, CONNECTOR 3P	
CN004	🌢:1-560-895-00	PIN, CONNECTOR 7P	
CN005	🌢:1-560-893-00	PIN, CONNECTOR 5P	
CN006	🌢:1-560-893-00	PIN, CONNECTOR 5P	
CN007	🌢:1-560-898-00	PIN, CONNECTOR 10P	
CN008	🌢:1-560-895-00	PIN, CONNECTOR 7P	
CN009	1-507-840-00	JACK, MINIATURE	
CN010	1-562-121-00	CONNECTOR, DIN 6P	
		TRIMMER	
CV001	1-141-275-00	CAP, TRIMMER	
		DIODE	
D001	=>8-719-911-19	DIODE 1SS119	
D002	=>8-719-911-19	DIODE 1SS119	
D005	=>8-719-911-19	DIODE 1SS119	
D006	8-719-000-06	DIODE MC921	
D009	8-719-000-06	DIODE MC921	
D011	=>8-719-911-19	DIODE 1SS119	
D012	=>8-719-911-19	DIODE 1SS119	
D013	=>8-719-911-19	DIODE 1SS119	
D014	=>8-719-911-19	DIODE 1SS119	
D015	=>8-719-911-19	DIODE 1SS119	
D016	8-719-000-12	DIODE MC931	
D017	=>8-719-911-19	DIODE 1SS119	
D018	=>8-719-911-19	DIODE 1SS119	
D019	=>8-719-911-19	DIODE 1SS119	
D020	=>8-719-911-19	DIODE 1SS119	
D021	=>8-719-911-19	DIODE 1SS119	
D022	=>8-719-911-19	DIODE 1SS119	
D023	=>8-719-911-19	DIODE 1SS119	
D025	=>8-719-911-19	DIODE 1SS119	
D027	8-719-000-06	DIODE MC921	
D029	8-719-100-56	DIODE RD10-EB1	
D030	=>8-719-911-19	DIODE 1SS119	
D031	=>8-719-911-19	DIODE 1SS119	
D033	=>8-719-911-19	DIODE 1SS119	
D036	=>8-719-911-19	DIODE 1SS119	
		DELAY LINE	
DL001	1-415-313-00	DELAY LINE (1H)	
DL401	1-415-352-11	DELAY LINE, 1H	
DL501	1-415-282-00	DELAY LINE	

Ref.No	Part No.	Description	Remark
		IC	
IC001	8-759-909-20	IC BA634	
IC002	8-759-904-95	IC BA7007	
IC003	8-759-202-47	IC CX10023	
IC004	8-759-208-94	IC CX894	
IC005	8-752-006-10	IC CX20061	
IC006	8-759-202-00	IC CX10021A-NP	
IC009	8-759-101-62	IC CX20043	
IC011	8-752-006-10	IC CX20061	
IC012	8-759-979-26	IC CX7926	
IC401	8-758-661-00	IC CX866A	
		COIL	
L001	1-407-499-00	MICRO INDUCTOR 3.9MMH	
L002	1-407-496-00	MICRO INDUCTOR 2.2MMH	
L003	1-408-408-00	MICRO INDUCTOR 8.2UH	
L004	1-408-406-00	MICRO INDUCTOR 5.6UH	
L005	1-408-415-00	MICRO INDUCTOR 33UH	
L006	1-408-429-00	MICRO INDUCTOR 470UH	
L007	1-408-427-00	MICRO INDUCTOR 330UH	
L008	1-408-421-11	MICRO INDUCTOR 100UH	
L010	1-408-427-00	MICRO INDUCTOR 330UH	
L011	1-408-423-00	MICRO INDUCTOR 150UH	
L012	1-408-409-00	MICRO INDUCTOR 10UH	
L014	1-408-422-00	MICRO INDUCTOR 120UH	
L015	1-408-419-00	MICRO INDUCTOR 68UH	
L016	1-408-413-00	MICRO INDUCTOR 22UH	
L017	1-408-423-00	MICRO INDUCTOR 150UH	
L018	1-408-419-00	MICRO INDUCTOR 68UH	
L019	1-408-416-00	MICRO INDUCTOR 39UH	
L020	1-408-416-00	MICRO INDUCTOR 39UH	
L021	1-408-422-00	MICRO INDUCTOR 120UH	
L022	1-408-424-00	MICRO INDUCTOR 180UH	
L023	1-408-422-00	MICRO INDUCTOR 120UH	
L026	1-408-419-00	MICRO INDUCTOR 68UH	
L401	1-408-397-00	MICRO INDUCTOR 1UH	
L402	1-408-397-00	MICRO INDUCTOR 1UH	
L501	1-408-408-00	MICRO INDUCTOR 8.2UH	
L502	1-408-423-00	MICRO INDUCTOR 150UH	
		FILTER LOW PASS	
LPF001	1-235-097-00	FILTER, LOW PASS	
		VARIABLE COIL	
LV001	1-407-291-00	MICRO INDUCTOR 15MMH	
LV002	1-407-573-00	COIL, VARIABLE 47UH	
LV003	1-407-571-00	COIL, VARIABLE 22UH	
LV501	1-407-569-00	COIL, VARIABLE 10UH	
		IC LINK	
PS001⚠	1-532-685-11	LINK, IC (N-20 0.8A)	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

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TRANSISTOR

Ref.No	Part No.	Description	Remark
Q001	8-729-900-36	TRANSISTOR DTC124ES	
Q002	=>8-729-245-83	TRANSISTOR 2SC2458	
Q003	8-729-600-12	TRANSISTOR 2SK108	
Q004	=>8-729-245-83	TRANSISTOR 2SC2458	
Q005	8-729-600-12	TRANSISTOR 2SK108	
Q007	=>8-729-245-83	TRANSISTOR 2SC2458	
Q010	8-729-177-32	TRANSISTOR 2SD773	
Q011	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q014	8-729-113-33	TRANSISTOR 2SB733-4	
Q015	=>8-729-245-83	TRANSISTOR 2SC2458	
Q016	=>8-729-245-83	TRANSISTOR 2SC2458	
Q019	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q020	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q021	=>8-729-245-83	TRANSISTOR 2SC2458	
Q022	=>8-729-245-83	TRANSISTOR 2SC2458	
Q023	=>8-729-245-83	TRANSISTOR 2SC2458	
Q024	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q025	=>8-729-245-83	TRANSISTOR 2SC2458	
Q026	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q027	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q028	=>8-729-245-83	TRANSISTOR 2SC2458	
Q029	=>8-729-245-83	TRANSISTOR 2SC2458	
Q030	=>8-729-245-83	TRANSISTOR 2SC2458	
Q031	=>8-729-245-83	TRANSISTOR 2SC2458	
Q032	=>8-729-245-83	TRANSISTOR 2SC2458	
Q033	=>8-729-245-83	TRANSISTOR 2SC2458	
Q034	=>8-729-245-83	TRANSISTOR 2SC2458	
Q035	8-729-603-50	TRANSISTOR 2SC403SP	
Q036	8-729-603-50	TRANSISTOR 2SC403SP	
Q037	8-729-384-46	TRANSISTOR 2SA844-C	
Q038	8-729-384-46	TRANSISTOR 2SA844-C	
Q039	8-729-603-50	TRANSISTOR 2SC403SP	
Q040	8-729-603-50	TRANSISTOR 2SC403SP	
Q041	8-729-384-46	TRANSISTOR 2SA844-C	
Q042	8-729-603-50	TRANSISTOR 2SC403SP	
Q043	8-729-603-50	TRANSISTOR 2SC403SP	
Q044	8-729-603-50	TRANSISTOR 2SC403SP	
Q045	8-729-384-46	TRANSISTOR 2SA844-C	
Q047	8-729-603-50	TRANSISTOR 2SC403SP	
Q048	8-729-603-50	TRANSISTOR 2SC403SP	
Q049	8-729-603-50	TRANSISTOR 2SC403SP	
Q050	8-729-603-50	TRANSISTOR 2SC403SP	
Q051	8-729-384-46	TRANSISTOR 2SA844-C	
Q052	8-729-603-50	TRANSISTOR 2SC403SP	
Q053	8-729-384-46	TRANSISTOR 2SA844-C	
Q054	8-729-384-46	TRANSISTOR 2SA844-C	
Q055	8-729-384-46	TRANSISTOR 2SA844-C	
Q056	8-729-603-50	TRANSISTOR 2SC403SP	
Q060	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q061	=>8-729-245-83	TRANSISTOR 2SC2458	
Q062	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q063	=>8-729-245-83	TRANSISTOR 2SC2458	
Q064	=>8-729-245-83	TRANSISTOR 2SC2458	
Q065	=>8-729-245-83	TRANSISTOR 2SC2458	
Q066	⚠.8-729-117-54	TRANSISTOR 2SA1175	
Q067	=>8-729-245-83	TRANSISTOR 2SC2458	
Q068	=>8-729-245-83	TRANSISTOR 2SC2458	
Q069	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q070	8-729-603-50	TRANSISTOR 2SC403SP	
Q071	=>8-729-245-83	TRANSISTOR 2SC2458	
Q072	=>8-729-245-83	TRANSISTOR 2SC2458	
Q074	=>8-729-245-83	TRANSISTOR 2SC2458	
Q075	8-729-900-85	TRANSISTOR DTC144WS	
Q100	8-729-900-85	TRANSISTOR DTC144WS	
Q101	8-729-900-89	TRANSISTOR DTC144ES	
Q102	8-729-900-65	TRANSISTOR DTA144ES	
Q103	=>8-729-245-83	TRANSISTOR 2SC2458	
Q401	=>8-729-245-83	TRANSISTOR 2SC2458	
Q501	=>8-729-245-83	TRANSISTOR 2SC2458	
Q502	=>8-729-245-83	TRANSISTOR 2SC2458	
Q503	=>8-729-245-83	TRANSISTOR 2SC2458	
Q504	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

Ref.No	Part No.	Description				Remark
R001	1-247-838-00	CARBON	2K	5%	1/6W	
R003	1-247-831-00	CARBON	1K	5%	1/6W	
R005	1-247-827-00	CARBON	680	5%	1/6W	
R006	1-247-879-00	CARBON	100K	5%	1/6W	
R007	1-247-871-00	CARBON	47K	5%	1/6W	
R008	1-247-879-00	CARBON	100K	5%	1/6W	
R009	1-247-879-00	CARBON	100K	5%	1/6W	
R010	1-247-814-00	CARBON	200	5%	1/6W	
R011	1-247-871-00	CARBON	47K	5%	1/6W	
R012	1-247-827-00	CARBON	680	5%	1/6W	
R013	1-247-879-00	CARBON	100K	5%	1/6W	
R014	1-247-871-00	CARBON	47K	5%	1/6W	
R015	1-247-879-00	CARBON	100K	5%	1/6W	
R016	1-247-879-00	CARBON	100K	5%	1/6W	
R017	1-247-814-00	CARBON	200	5%	1/6W	
R018	1-247-871-00	CARBON	47K	5%	1/6W	
R022	1-247-847-00	CARBON	4.7K	5%	1/6W	
R026	1-247-867-00	CARBON	33K	5%	1/6W	
R027	1-247-867-00	CARBON	33K	5%	1/6W	
R028	1-247-877-00	CARBON	82K	5%	1/6W	
R029	1-247-855-00	CARBON	10K	5%	1/6W	
R030	1-247-867-00	CARBON	33K	5%	1/6W	
R031	⚠.1-212-857-00	FUSIBLE	10	5%	1/4W	F
R032	1-247-831-00	CARBON	1K	5%	1/6W	
R035	1-247-859-00	CARBON	15K	5%	1/6W	
R037	1-247-869-00	CARBON	39K	5%	1/6W	
R038	1-247-837-00	CARBON	1.8K	5%	1/6W	
R039	⚠.1-212-857-00	FUSIBLE	10	5%	1/4W	F
R040	⚠.1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R041	1-247-838-00	CARBON	2K	5%	1/6W	

NOTE:

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When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R046	1-247-835-00	CARBON	1.5K	5%	1/6W	
R047	1-247-879-00	CARBON	100K	5%	1/6W	
R048	1-247-831-00	CARBON	1K	5%	1/6W	
R049	1-247-863-00	CARBON	22K	5%	1/6W	
R050	1-247-853-00	CARBON	8.2K	5%	1/6W	
R051	1-247-821-00	CARBON	390	5%	1/6W	
R052	1-247-819-00	CARBON	330	5%	1/6W	
R053	1-247-843-00	CARBON	3.3K	5%	1/6W	
R054	1-247-847-00	CARBON	4.7K	5%	1/6W	
R055	1-247-849-00	CARBON	5.6K	5%	1/6W	
R056	1-247-867-00	CARBON	33K	5%	1/6W	
R058	1-247-855-00	CARBON	10K	5%	1/6W	
R059	1-247-859-00	CARBON	15K	5%	1/6W	
R060	1-247-867-00	CARBON	33K	5%	1/6W	
R061	1-247-855-00	CARBON	10K	5%	1/6W	
R062	1-247-855-00	CARBON	10K	5%	1/6W	
R063	1-247-841-00	CARBON	2.7K	5%	1/6W	
R064	1-247-848-00	CARBON	5.1K	5%	1/6W	
R065	1-247-889-00	CARBON	270K	5%	1/6W	
R066	1-247-870-00	CARBON	43K	5%	1/6W	
R067	1-247-862-00	CARBON	20K	5%	1/6W	
R068	1-247-838-00	CARBON	2K	5%	1/6W	
R069	1-247-831-00	CARBON	1K	5%	1/6W	
R070	1-247-831-00	CARBON	1K	5%	1/6W	
R071	1-247-855-00	CARBON	10K	5%	1/6W	
R072	1-247-841-00	CARBON	2.7K	5%	1/6W	
R073	1-247-831-00	CARBON	1K	5%	1/6W	
R074	1-247-831-00	CARBON	1K	5%	1/6W	
R075	1-247-815-00	CARBON	220	5%	1/6W	
R076	1-247-855-00	CARBON	10K	5%	1/6W	
R077	1-247-855-00	CARBON	10K	5%	1/6W	
R078	1-247-867-00	CARBON	33K	5%	1/6W	
R079	1-247-855-00	CARBON	10K	5%	1/6W	
R080	1-247-853-00	CARBON	8.2K	5%	1/6W	
R081	1-247-843-00	CARBON	3.3K	5%	1/6W	
R082	1-247-871-00	CARBON	47K	5%	1/6W	
R083	1-247-825-00	CARBON	560	5%	1/6W	
R084	1-247-831-00	CARBON	1K	5%	1/6W	
R085	1-247-803-00	CARBON	68	5%	1/6W	
R086	1-247-825-00	CARBON	560	5%	1/6W	
R087	1-247-825-00	CARBON	560	5%	1/6W	
R088	1-247-801-00	CARBON	56	5%	1/6W	
R091	1-247-824-00	CARBON	510	5%	1/6W	
R092	1-247-791-00	CARBON	22	5%	1/6W	
R093	1-247-809-00	CARBON	120	5%	1/6W	
R094	1-247-869-00	CARBON	39K	5%	1/6W	
R095	1-247-872-00	CARBON	51K	5%	1/6W	
R096	1-247-879-00	CARBON	100K	5%	1/6W	
R097	1-247-882-00	CARBON	130K	5%	1/6W	
R098	1-247-890-00	CARBON	300K	5%	1/6W	
R100	1-247-869-00	CARBON	39K	5%	1/6W	
R101	1-247-864-00	CARBON	24K	5%	1/6W	
R103	1-247-831-00	CARBON	1K	5%	1/6W	
R104	1-247-839-00	CARBON	2.2K	5%	1/6W	
R105	1-247-829-00	CARBON	820	5%	1/6W	
R106	1-247-831-00	CARBON	1K	5%	1/6W	
R107	1-247-824-00	CARBON	510	5%	1/6W	
R108	1-247-829-00	CARBON	820	5%	1/6W	
R109	1-247-867-00	CARBON	33K	5%	1/6W	
R111	1-247-846-00	CARBON	4.3K	5%	1/6W	
R112	1-247-854-00	CARBON	9.1K	5%	1/6W	
R113	1-247-843-00	CARBON	3.3K	5%	1/6W	
R114	1-247-828-00	CARBON	750	5%	1/6W	
R115	1-247-879-00	CARBON	100K	5%	1/6W	
R116	1-247-853-00	CARBON	8.2K	5%	1/6W	
R117	1-247-845-00	CARBON	3.9K	5%	1/6W	
R118	1-247-867-00	CARBON	33K	5%	1/6W	
R119	1-247-855-00	CARBON	10K	5%	1/6W	
R120	1-247-831-00	CARBON	1K	5%	1/6W	
R121	1-247-831-00	CARBON	1K	5%	1/6W	
R122	1-247-839-00	CARBON	2.2K	5%	1/6W	
R123	1-247-841-00	CARBON	2.7K	5%	1/6W	
R124	1-247-819-00	CARBON	330	5%	1/6W	
R125	1-247-831-00	CARBON	1K	5%	1/6W	
R126	1-247-831-00	CARBON	1K	5%	1/6W	
R127	1-247-835-00	CARBON	1.5K	5%	1/6W	
R128	1-247-831-00	CARBON	1K	5%	1/6W	
R129	1-247-867-00	CARBON	33K	5%	1/6W	
R130	1-247-842-00	CARBON	3K	5%	1/6W	
R131	1-247-841-00	CARBON	2.7K	5%	1/6W	
R132	1-247-887-00	CARBON	220K	5%	1/6W	
R133	1-247-807-00	CARBON	100	5%	1/6W	
R134	1-247-845-00	CARBON	3.9K	5%	1/6W	
R135	1-247-883-00	CARBON	150K	5%	1/6W	
R136	1-247-879-00	CARBON	100K	5%	1/6W	
R137	1-247-857-00	CARBON	12K	5%	1/6W	
R138	1-247-861-00	CARBON	18K	5%	1/6W	
R139	1-247-841-00	CARBON	2.7K	5%	1/6W	
R140	1-247-867-00	CARBON	33K	5%	1/6W	
R141	1-247-831-00	CARBON	1K	5%	1/6W	
R142	1-247-842-00	CARBON	3K	5%	1/6W	
R143	1-247-855-00	CARBON	10K	5%	1/6W	
R144	1-247-824-00	CARBON	510	5%	1/6W	
R145	1-247-838-00	CARBON	2K	5%	1/6W	
R146	1-247-831-00	CARBON	1K	5%	1/6W	
R147	1-247-855-00	CARBON	10K	5%	1/6W	
R148	1-247-831-00	CARBON	1K	5%	1/6W	
R149	1-247-819-00	CARBON	330	5%	1/6W	
R150	1-247-863-00	CARBON	22K	5%	1/6W	
R151	1-247-812-00	CARBON	160	5%	1/6W	
R152	1-247-829-00	CARBON	820	5%	1/6W	
R153	1-247-863-00	CARBON	22K	5%	1/6W	
R154	1-247-821-00	CARBON	390	5%	1/6W	
R155	1-247-839-00	CARBON	2.2K	5%	1/6W	
R156	1-247-839-00	CARBON	2.2K	5%	1/6W	
R157	1-247-837-00	CARBON	1.8K	5%	1/6W	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R158	1-247-817-00	CARBON	270	5%	1/6W	
R159	1-247-810-00	CARBON	130	5%	1/6W	
R160	1-247-832-00	CARBON	1.1K	5%	1/6W	
R161	1-247-855-00	CARBON	10K	5%	1/6W	
R162	1-247-835-00	CARBON	1.5K	5%	1/6W	
R163	1-247-842-00	CARBON	3K	5%	1/6W	
R164	1-247-830-00	CARBON	910	5%	1/6W	
R165	1-247-834-00	CARBON	1.3K	5%	1/6W	
R166	1-247-818-00	CARBON	300	5%	1/6W	
R167	1-247-849-00	CARBON	5.6K	5%	1/6W	
R168	1-247-836-00	CARBON	1.6K	5%	1/6W	
R169	1-247-840-00	CARBON	2.4K	5%	1/6W	
R170	1-247-804-00	CARBON	75	5%	1/6W	
R171	1-247-901-00	CARBON	820K	5%	1/6W	
R172	1-247-857-00	CARBON	12K	5%	1/6W	
R173	1-247-861-00	CARBON	18K	5%	1/6W	
R174	1-247-839-00	CARBON	2.2K	5%	1/6W	
R175	1-247-831-00	CARBON	1K	5%	1/6W	
R176	1-247-839-00	CARBON	2.2K	5%	1/6W	
R178	1-247-839-00	CARBON	2.2K	5%	1/6W	
R179	1-247-843-00	CARBON	3.3K	5%	1/6W	
R180	1-247-835-00	CARBON	1.5K	5%	1/6W	
R181	1-247-835-00	CARBON	1.5K	5%	1/6W	
R185	1-247-843-00	CARBON	3.3K	5%	1/6W	
R186	1-247-830-00	CARBON	910	5%	1/6W	
R187	1-247-831-00	CARBON	1K	5%	1/6W	
R188	1-247-839-00	CARBON	2.2K	5%	1/6W	
R189	1-247-834-00	CARBON	1.3K	5%	1/6W	
R190	1-247-834-00	CARBON	1.3K	5%	1/6W	
R191	1-247-831-00	CARBON	1K	5%	1/6W	
R192	1-247-831-00	CARBON	1K	5%	1/6W	
R193	1-247-855-00	CARBON	10K	5%	1/6W	
R194	1-247-819-00	CARBON	330	5%	1/6W	
R195	1-247-812-00	CARBON	160	5%	1/6W	
R196	1-247-863-00	CARBON	22K	5%	1/6W	
R197	1-247-863-00	CARBON	22K	5%	1/6W	
R198	1-247-829-00	CARBON	820	5%	1/6W	
R199	1-247-821-00	CARBON	390	5%	1/6W	
R200	1-247-839-00	CARBON	2.2K	5%	1/6W	
R201	1-247-837-00	CARBON	1.8K	5%	1/6W	
R202	1-247-831-00	CARBON	1K	5%	1/6W	
R203	1-247-815-00	CARBON	220	5%	1/6W	
R204	1-247-811-00	CARBON	150	5%	1/6W	
R205	1-247-811-00	CARBON	150	5%	1/6W	
R206	1-247-834-00	CARBON	1.3K	5%	1/6W	
R207	1-247-874-00	CARBON	62K	5%	1/6W	
R208	1-247-874-00	CARBON	62K	5%	1/6W	
R209	1-247-833-00	CARBON	1.2K	5%	1/6W	
R210	1-247-824-00	CARBON	510	5%	1/6W	
R211	1-247-831-00	CARBON	1K	5%	1/6W	
R212	1-247-824-00	CARBON	510	5%	1/6W	
R213	1-247-829-00	CARBON	820	5%	1/6W	
R214	1-247-831-00	CARBON	1K	5%	1/6W	
R215	1-247-831-00	CARBON	1K	5%	1/6W	
R216	1-247-832-00	CARBON	1.1K	5%	1/6W	
R217	1-247-831-00	CARBON	1K	5%	1/6W	
R218	1-247-831-00	CARBON	1K	5%	1/6W	
R219	1-247-866-00	CARBON	30K	5%	1/6W	
R220	1-247-874-00	CARBON	62K	5%	1/6W	
R221	1-247-849-00	CARBON	5.6K	5%	1/6W	
R222	1-247-837-00	CARBON	1.8K	5%	1/6W	
R223	1-247-837-00	CARBON	1.8K	5%	1/6W	
R231	1-247-867-00	CARBON	33K	5%	1/6W	
R235	1-247-831-00	CARBON	1K	5%	1/6W	
R236	1-247-853-00	CARBON	8.2K	5%	1/6W	
R238	1-247-858-00	CARBON	13K	5%	1/6W	
R239	1-247-855-00	CARBON	10K	5%	1/6W	
R240	1-247-839-00	CARBON	2.2K	5%	1/6W	
R241	1-247-804-00	CARBON	75	5%	1/6W	
R242	1-247-879-00	CARBON	100K	5%	1/6W	
R243	1-247-855-00	CARBON	10K	5%	1/6W	
R244	1-247-851-00	CARBON	6.8K	5%	1/6W	
R245	1-247-879-00	CARBON	100K	5%	1/6W	
R246	1-247-879-00	CARBON	100K	5%	1/6W	
R247	1-247-871-00	CARBON	47K	5%	1/6W	
R248	1-247-818-00	CARBON	300	5%	1/6W	
R249	1-247-811-00	CARBON	150	5%	1/6W	
R250	1-247-808-00	CARBON	110	5%	1/6W	
R251	1-247-838-00	CARBON	2K	5%	1/6W	
R252	1-247-803-00	CARBON	68	5%	1/6W	
R253	1-247-831-00	CARBON	1K	5%	1/6W	
R254	1-247-855-00	CARBON	10K	5%	1/6W	
R255	1-247-858-00	CARBON	13K	5%	1/6W	
R256	1-247-843-00	CARBON	3.3K	5%	1/6W	
R257	1-247-835-00	CARBON	1.5K	5%	1/6W	
R258	1-247-852-00	CARBON	7.5K	5%	1/6W	
R259	1-247-831-00	CARBON	1K	5%	1/6W	
R260	1-247-841-00	CARBON	2.7K	5%	1/6W	
R261	1-247-863-00	CARBON	22K	5%	1/6W	
R262	1-247-859-00	CARBON	15K	5%	1/6W	
R274	1-247-883-00	CARBON	150K	5%	1/6W	
R275	1-247-871-00	CARBON	47K	5%	1/6W	
R276	1-247-849-00	CARBON	5.6K	5%	1/6W	
R277	1-247-855-00	CARBON	10K	5%	1/6W	
R280	1-247-835-00	CARBON	1.5K	5%	1/6W	
R281	1-247-890-00	CARBON	300K	5%	1/6W	
R282	1-247-807-00	CARBON	100	5%	1/6W	
R283	1-247-838-00	CARBON	2K	5%	1/6W	
R284	1-247-877-00	CARBON	82K	5%	1/6W	
R286	1-247-848-00	CARBON	5.1K	5%	1/6W	
R287	1-247-831-00	CARBON	1K	5%	1/6W	
R288	1-247-803-00	CARBON	68	5%	1/6W	
R291	1-247-863-00	CARBON	22K	5%	1/6W	
R292	1-247-875-00	CARBON	68K	5%	1/6W	
R293	1-247-819-00	CARBON	330	5%	1/6W	
R294	1-247-818-00	CARBON	300	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R295	1-247-839-00	CARBON	2.2K	5%	1/6W	
R296	1-247-811-00	CARBON	150	5%	1/6W	
R297	1-247-839-00	CARBON	2.2K	5%	1/6W	
R298	1-247-894-00	CARBON	430K	5%	1/6W	
R299	1-247-892-00	CARBON	360K	5%	1/6W	
R300	1-247-818-00	CARBON	300	5%	1/6W	
R301	1-247-855-00	CARBON	10K	5%	1/6W	
R302	1-247-819-00	CARBON	330	5%	1/6W	
R303	1-247-819-00	CARBON	330	5%	1/6W	
R304	1-247-847-00	CARBON	4.7K	5%	1/6W	
R305	1-247-835-00	CARBON	1.5K	5%	1/6W	
R312	1-247-847-00	CARBON	4.7K	5%	1/6W	
R313	1-247-823-00	CARBON	470	5%	1/6W	
R314	1-247-871-00	CARBON	47K	5%	1/6W	
R315	1-247-855-00	CARBON	10K	5%	1/6W	
R320	1-247-878-00	CARBON	91K	5%	1/6W	
R321	1-247-887-00	CARBON	220K	5%	1/6W	
R325	1-247-807-00	CARBON	100	5%	1/6W	
R326	1-247-852-00	CARBON	7.5K	5%	1/6W	
R327	1-247-863-00	CARBON	22K	5%	1/6W	
R328	1-247-848-00	CARBON	5.1K	5%	1/6W	
R331	1-247-852-00	CARBON	7.5K	5%	1/6W	
R342	1-247-807-00	CARBON	100	5%	1/6W	
R345	1-247-867-00	CARBON	33K	5%	1/6W	
R346	1-247-847-00	CARBON	4.7K	5%	1/6W	
R351	1-247-815-00	CARBON	220	5%	1/6W	
R352	1-247-855-00	CARBON	10K	5%	1/6W	
R353	1-247-831-00	CARBON	1K	5%	1/6W	
R354	1-247-815-00	CARBON	220	5%	1/6W	
R355	1-247-840-00	CARBON	2.4K	5%	1/6W	
R356	1-247-840-00	CARBON	2.4K	5%	1/6W	
R357	1-247-829-00	CARBON	820	5%	1/6W	
R401	1-247-810-00	CARBON	130	5%	1/6W	
R402	1-247-810-00	CARBON	130	5%	1/6W	
R403	1-247-867-00	CARBON	33K	5%	1/6W	
R404	1-247-871-00	CARBON	47K	5%	1/6W	
R405	1-247-831-00	CARBON	1K	5%	1/6W	
R406	1-247-832-00	CARBON	1.1K	5%	1/6W	
R407	1-247-832-00	CARBON	1.1K	5%	1/6W	
R408	1-247-849-00	CARBON	5.6K	5%	1/6W	
R409	1-247-831-00	CARBON	1K	5%	1/6W	
R410	1-247-831-00	CARBON	1K	5%	1/6W	
R411	1-247-847-00	CARBON	4.7K	5%	1/6W	
R412	1-247-828-00	CARBON	750	5%	1/6W	
R413	1-247-812-00	CARBON	160	5%	1/6W	
R414	1-247-847-00	CARBON	4.7K	5%	1/6W	
R415	1-247-831-00	CARBON	1K	5%	1/6W	
R416	1-247-846-00	CARBON	4.3K	5%	1/6W	
R510	1-247-824-00	CARBON	510	5%	1/6W	
R511	1-247-867-00	CARBON	33K	5%	1/6W	
R512	1-247-847-00	CARBON	4.7K	5%	1/6W	
R513	1-247-863-00	CARBON	22K	5%	1/6W	
R514	1-247-821-00	CARBON	390	5%	1/6W	
R515	1-247-839-00	CARBON	2.2K	5%	1/6W	
R516	1-247-821-00	CARBON	390	5%	1/6W	
R517	1-247-821-00	CARBON	390	5%	1/6W	
R518	1-247-821-00	CARBON	390	5%	1/6W	
R519	1-247-821-00	CARBON	390	5%	1/6W	
R520	1-247-839-00	CARBON	2.2K	5%	1/6W	
R521	1-247-821-00	CARBON	390	5%	1/6W	
R522	1-247-839-00	CARBON	2.2K	5%	1/6W	
R523	1-247-812-00	CARBON	160	5%	1/6W	

VARIABLE RESISTOR

Ref.No	Part No.	Description
RV001	1-228-989-00	RES, ADJ, METAL GLAZE 470
RV002	1-228-748-00	RES, ADJ, CARBON 10K
RV003	1-228-750-00	RES, ADJ, CARBON 47K
RV004	1-228-989-00	RES, ADJ, METAL GLAZE 470
RV005	1-228-750-00	RES, ADJ, CARBON 47K
RV006	1-228-749-00	RES, ADJ, CARBON 22K
RV007	1-228-748-00	RES, ADJ, CARBON 10K
RV008	1-228-745-00	RES, ADJ, CARBON 1K
RV009	1-228-996-00	RES, ADJ, METAL GLAZE 47K
RV010	1-228-749-00	RES, ADJ, CARBON 22K
RV012	1-228-750-00	RES, ADJ, CARBON 47K
RV013	1-228-750-00	RES, ADJ, CARBON 47K
RV014	1-228-748-00	RES, ADJ, CARBON 10K
RV015	1-228-989-00	RES, ADJ, METAL GLAZE 470
RV016	1-228-745-00	RES, ADJ, CARBON 1K
RV017	1-228-753-00	RES, ADJ, CARBON 470K
RV019	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K
RV020	1-228-745-00	RES, ADJ, CARBON 1K
RV021	1-228-750-00	RES, ADJ, CARBON 47K
RV401	1-228-994-00	RES, ADJ, METAL GLAZE 10K
RV501	1-228-744-00	RES, ADJ, CARBON 470

COIL

Ref.No	Part No.	Description
T001	1-426-093-00	COIL, REC C BPT

CRYSTAL

Ref.No	Part No.	Description
X001	1-527-345-00	CRYSTAL, OSC

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♠:A-6711-528-A RP-17 BOARD, COMPLETE
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♠:3-684-081-01 CASE (A) (MAIN), SHIELD, RP
♠:3-684-082-02 LID, UPPER, RP SHIELD CASE (A)
♠:3-684-083-02 LID, BOTTOM, RP SHIELD CASE(A)
♠:3-684-084-01 CASE (B) (MAIN), SHIELD, RP
♠:3-684-085-01 LID, UPPER, RP SHIELD CASE (B)

♠:3-684-086-01 LID, BOTTOM, RP SHIELD CASE(B)

CAPACITOR

Ref.No	Part No.	Description			Remark
C003	1-101-004-00	CERAMIC	0.01MF	50V	

When indicating parts by reference number, please include the board name.

RP-17

Ref.No	Part No.	Description			Remark
C004	1-123-356-00	ELECT	10MF	20%	16V
C005	1-123-379-00	ELECT	0.47MF	20%	50V
C006	1-101-004-00	CERAMIC	0.01MF		50V
C007	1-123-356-00	ELECT	10MF	20%	16V
C008	1-101-004-00	CERAMIC	0.01MF		50V
C012	1-101-004-00	CERAMIC	0.01MF		50V
C013	1-102-820-00	CERAMIC	330PF	5%	50V
C014	1-123-356-00	ELECT	10MF	20%	16V
C017	1-102-973-00	CERAMIC	100PF	5%	50V
C018	1-102-973-00	CERAMIC	100PF	5%	50V
C019	1-102-824-00	CERAMIC	470PF	5%	50V
C020	1-101-004-00	CERAMIC	0.01MF		50V
C021	1-101-880-00	CERAMIC	47PF	5%	50V
C022	1-101-880-00	CERAMIC	47PF	5%	50V
C023	1-123-333-00	ELECT	100MF	20%	16V
C024	1-123-356-00	ELECT	10MF	20%	16V
C025	1-101-004-00	CERAMIC	0.01MF		50V
C026	1-123-379-00	ELECT	0.47MF	20%	50V
C027	1-123-356-00	ELECT	10MF	20%	16V
C028	1-101-004-00	CERAMIC	0.01MF		50V
C029	1-102-521-00	CERAMIC	43PF	5%	50V
C030	1-101-004-00	CERAMIC	0.01MF		50V
C033	1-102-977-00	CERAMIC	200PF	5%	50V
C034	1-123-332-00	ELECT	47MF	20%	16V
C035	1-101-004-00	CERAMIC	0.01MF		50V
C036	1-123-356-00	ELECT	10MF	20%	16V
C037	1-101-004-00	CERAMIC	0.01MF		50V
C038	1-101-006-00	CERAMIC	0.047MF		50V
C039	1-101-006-00	CERAMIC	0.047MF		50V
C040	1-101-004-00	CERAMIC	0.01MF		50V
C041	1-102-960-00	CERAMIC	24PF	5%	50V
C042	1-102-960-00	CERAMIC	24PF	5%	50V
C043	1-123-318-00	ELECT	33MF	20%	16V
C044	1-101-004-00	CERAMIC	0.01MF		50V
C045	1-102-514-00	CERAMIC	22PF	5%	50V
C046	1-101-004-00	CERAMIC	0.01MF		50V
C047	1-101-004-00	CERAMIC	0.01MF		50V
C048	1-101-004-00	CERAMIC	0.01MF		50V
C049	1-101-004-00	CERAMIC	0.01MF		50V
C050	1-101-004-00	CERAMIC	0.01MF		50V
C054	1-101-004-00	CERAMIC	0.01MF		50V
C055	1-101-004-00	CERAMIC	0.01MF		50V
C056	1-161-025-00	CERAMIC	0.1MF	10%	25V
C057	1-123-333-00	ELECT	100MF	20%	16V
C058	1-161-772-00	CERAMIC	0.1MF	10%	25V
C101	1-161-025-00	CERAMIC	0.1MF	10%	25V
C102	1-101-004-00	CERAMIC	0.01MF		50V
C103	1-161-025-00	CERAMIC	0.1MF	10%	25V
C104	1-101-004-00	CERAMIC	0.01MF		50V
C105	1-161-025-00	CERAMIC	0.1MF	10%	25V

Ref.No	Part No.	Description			Remark
C106	1-102-977-00	CERAMIC	200PF	5%	50V
C107	1-123-356-00	ELECT	10MF	20%	16V
C108	1-101-004-00	CERAMIC	0.01MF		50V
C109	1-161-025-00	CERAMIC	0.1MF	10%	25V
C110	1-101-004-00	CERAMIC	0.01MF		50V
C111	1-101-004-00	CERAMIC	0.01MF		50V
C112	1-161-025-00	CERAMIC	0.1MF	10%	25V
C113	1-161-025-00	CERAMIC	0.1MF	10%	25V
C114	1-102-978-00	CERAMIC	220PF	5%	50V
C115	1-101-004-00	CERAMIC	0.01MF		50V
C116	1-161-025-00	CERAMIC	0.1MF	10%	25V
C117	1-161-025-00	CERAMIC	0.1MF	10%	25V
C118	1-123-380-00	ELECT	1MF	20%	50V
C119	1-101-004-00	CERAMIC	0.01MF		50V
C120	1-123-380-00	ELECT	1MF	20%	50V
C121	1-102-531-00	CERAMIC	150PF	5%	50V
C122	1-161-025-00	CERAMIC	0.1MF	10%	25V
C123	1-123-318-00	ELECT	33MF	20%	16V
C124	1-101-004-00	CERAMIC	0.01MF		50V
C125	1-101-004-00	CERAMIC	0.01MF		50V
C126	1-161-025-00	CERAMIC	0.1MF	10%	25V
C127	1-123-318-00	ELECT	33MF	20%	16V
C128	1-101-004-00	CERAMIC	0.01MF		50V
C129	1-101-004-00	CERAMIC	0.01MF		50V
C130	1-161-025-00	CERAMIC	0.1MF	10%	25V
C201	1-123-356-00	ELECT	10MF	20%	16V
C202	1-123-356-00	ELECT	10MF	20%	16V
C203	1-123-356-00	ELECT	10MF	20%	16V
C204	1-123-356-00	ELECT	10MF	20%	16V
C205	1-123-356-00	ELECT	10MF	20%	16V
C206	1-123-380-00	ELECT	1MF	20%	50V
C207	1-123-318-00	ELECT	33MF	20%	16V
C208	1-123-356-00	ELECT	10MF	20%	16V
C209	1-123-356-00	ELECT	10MF	20%	16V
C210	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C211	1-123-321-00	ELECT	220MF	20%	16V
C301	1-101-004-00	CERAMIC	0.01MF		50V
C302	1-123-330-00	ELECT	22MF	20%	16V
C304	1-123-356-00	ELECT	10MF	20%	16V
C305	1-161-025-00	CERAMIC	0.1MF	10%	25V
C306	1-101-004-00	CERAMIC	0.01MF		50V
C307	1-123-356-00	ELECT	10MF	20%	16V
C308	1-123-328-00	ELECT	4.7MF	20%	25V
C309	1-123-328-00	ELECT	4.7MF	20%	25V

CONNECTOR

Ref.No	Part No.	Description
CN001♠	:1-564-031-00	PIN, CONNECTOR 6P
CN002♠	:1-564-030-00	PIN, CONNECTOR 5P
CN003♠	:1-564-028-00	PIN, CONNECTOR 3P
CN101♠	:1-564-031-00	PIN, CONNECTOR 6P
CN102♠	:1-564-037-11	PIN, CONNECTOR 12P
CN103♠	:1-564-030-21	PIN, CONNECTOR 5P
CN202♠	:1-564-030-00	PIN, CONNECTOR 5P

When indicating parts by reference number, please include the board name.

DIODE

Ref.No	Part No.	Description	Remark
D001	8-719-901-33	DIODE 1SS133	
D002	8-719-901-33	DIODE 1SS133	
D003	=>8-719-911-19	DIODE 1SS119	
D004	=>8-719-911-19	DIODE 1SS119	
D101	8-719-911-19	DIODE 1SS119	
D102	8-719-911-19	DIODE 1SS119	
D103	8-719-911-19	DIODE 1SS119	
D104	8-719-911-19	DIODE 1SS119	
D105	8-719-911-19	DIODE 1SS119	
D106	8-719-911-19	DIODE 1SS119	
D201	8-719-911-19	DIODE 1SS119	
D202	8-719-911-19	DIODE 1SS119	
D203	8-719-911-19	DIODE 1SS119	
D301	8-719-911-19	DIODE 1SS119	

IC

Ref.No	Part No.	Description	Remark
IC001	8-752-004-50	IC CX20045	
IC002	8-759-200-60	IC TA7060AP	
IC201	8-759-145-58	IC UPC4558C	
IC301	8-759-145-58	IC UPC4558C	

COIL

Ref.No	Part No.	Description	Remark
L001	1-408-876-00	MICRO INDUCTOR 0.18UH	
L002	1-408-427-00	MICRO INDUCTOR 330UH	
L003	1-408-421-00	MICRO INDUCTOR 100UH	
L004	1-408-423-00	MICRO INDUCTOR 150UH	
L006	1-408-421-00	MICRO INDUCTOR 100UH	
L009	1-408-422-00	MICRO INDUCTOR 120UH	
L010	1-408-411-00	MICRO INDUCTOR 15UH	
L011	1-408-411-00	MICRO INDUCTOR 15UH	
L012	1-408-878-00	MICRO INDUCTOR 0.33UH	
L013	1-408-427-00	MICRO INDUCTOR 330UH	
L014	1-408-421-00	MICRO INDUCTOR 100UH	
L015	1-408-408-00	MICRO INDUCTOR 8.2UH	
L016	1-408-421-00	MICRO INDUCTOR 100UH	
L017	1-408-415-00	MICRO INDUCTOR 33UH	
L101	1-408-405-00	MICRO INDUCTOR 4.7UH	
L102	1-408-421-00	MICRO INDUCTOR 100UH	
L103	1-408-405-00	MICRO INDUCTOR 4.7UH	
L104	1-408-421-00	MICRO INDUCTOR 100UH	
L105	1-408-421-00	MICRO INDUCTOR 100UH	

TRANSISTOR

Ref.No	Part No.	Description	Remark
Q001	=>8-729-245-83	TRANSISTOR 2SC2458	
Q002	=>8-729-245-83	TRANSISTOR 2SC2458	
Q003	=>8-729-177-43	TRANSISTOR 2SD774	
Q004	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q005	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q006	=>8-729-245-83	TRANSISTOR 2SC2458	
Q101	=>8-729-245-83	TRANSISTOR 2SC2458	
Q102	8-729-800-42	TRANSISTOR 2SK152	
Q103	=>8-729-245-83	TRANSISTOR 2SC2458	
Q104	8-729-384-46	TRANSISTOR 2SA844-C	
Q105	8-729-603-50	TRANSISTOR 2SC403SP	
Q106	=>8-729-245-83	TRANSISTOR 2SC2458	
Q107	8-729-800-42	TRANSISTOR 2SK152	
Q108	8-729-384-46	TRANSISTOR 2SA844-C	
Q109	8-729-603-50	TRANSISTOR 2SC403SP	
Q110	=>8-729-245-83	TRANSISTOR 2SC2458	
Q111	8-729-603-50	TRANSISTOR 2SC403SP	
Q112	8-729-384-46	TRANSISTOR 2SA844-C	
Q113	8-729-113-33	TRANSISTOR 2SB733-4	
Q114	8-729-603-50	TRANSISTOR 2SC403SP	
Q115	8-729-603-50	TRANSISTOR 2SC403SP	
Q201	=>8-729-245-83	TRANSISTOR 2SC2458	
Q301	8-729-173-37	TRANSISTOR 2SA733-P	
Q302	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

Ref.No	Part No.	Description				Remark
R001	1-247-831-00	CARBON	1K	5%	1/6W	
R002	1-247-816-00	CARBON	240	5%	1/6W	
R004	1-247-857-00	CARBON	12K	5%	1/6W	
R009	1-247-832-00	CARBON	1.1K	5%	1/6W	
R010	1-247-829-00	CARBON	820	5%	1/6W	
R012	1-247-831-00	CARBON	1K	5%	1/6W	
R013	1-247-831-00	CARBON	1K	5%	1/6W	
R015	1-247-831-00	CARBON	1K	5%	1/6W	
R016	1-247-879-00	CARBON	100K	5%	1/6W	
R017	1-247-835-00	CARBON	1.5K	5%	1/6W	
R020	1-247-816-00	CARBON	240	5%	1/6W	
R022	1-247-866-00	CARBON	30K	5%	1/6W	
R023	1-247-862-00	CARBON	20K	5%	1/6W	
R024	1-247-824-00	CARBON	510	5%	1/6W	
R025	1-247-824-00	CARBON	510	5%	1/6W	
R026	1-247-823-00	CARBON	470	5%	1/6W	
R028	1-247-824-00	CARBON	510	5%	1/6W	
R036	1-247-836-00	CARBON	1.6K	5%	1/6W	
R037	1-247-864-00	CARBON	24K	5%	1/6W	
R038	1-247-866-00	CARBON	30K	5%	1/6W	
R039	⚠ 1-212-857-00	FUSIBLE	10	5%	1/4W	F
R040	1-247-831-00	CARBON	1K	5%	1/6W	
R042	1-247-831-00	CARBON	1K	5%	1/6W	
R043	1-247-829-00	CARBON	820	5%	1/6W	
R044	1-247-855-00	CARBON	10K	5%	1/6W	
R045	1-247-807-00	CARBON	100	5%	1/6W	
R048	1-247-819-00	CARBON	330	5%	1/6W	
R049	1-247-819-00	CARBON	330	5%	1/6W	
R050	1-247-831-00	CARBON	1K	5%	1/6W	
R051	1-247-857-00	CARBON	12K	5%	1/6W	
R052	1-247-858-00	CARBON	13K	5%	1/6W	
R053	1-247-831-00	CARBON	1K	5%	1/6W	
R054	1-247-829-00	CARBON	820	5%	1/6W	
R055	1-247-825-00	CARBON	560	5%	1/6W	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

RP-17 AF-3

Ref.No	Part No.	Description				Remark
R056	1-247-863-00	CARBON	22K	5%	1/6W	
R057	1-247-863-00	CARBON	22K	5%	1/6W	
R101	1-247-849-00	CARBON	5.6K	5%	1/6W	
R102	1-247-831-00	CARBON	1K	5%	1/6W	
R103	1-247-855-00	CARBON	10K	5%	1/6W	
R104	1-247-855-00	CARBON	10K	5%	1/6W	
R105	1-247-821-00	CARBON	390	5%	1/6W	
R106	1-247-818-00	CARBON	300	5%	1/6W	
R107	1-247-810-00	CARBON	130	5%	1/6W	
R109 ⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R110	1-247-831-00	CARBON	1K	5%	1/6W	
R111	1-247-807-00	CARBON	100	5%	1/6W	
R112	1-247-807-00	CARBON	100	5%	1/6W	
R113	1-247-849-00	CARBON	5.6K	5%	1/6W	
R114	1-247-818-00	CARBON	300	5%	1/6W	
R115	1-247-799-00	CARBON	47	5%	1/6W	
R116	1-247-827-00	CARBON	680	5%	1/6W	
R117	1-247-821-00	CARBON	390	5%	1/6W	
R118	1-247-807-00	CARBON	100	5%	1/6W	
R119	1-247-855-00	CARBON	10K	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R122	1-247-831-00	CARBON	1K	5%	1/6W	
R123	1-247-807-00	CARBON	100	5%	1/6W	
R124	1-247-839-00	CARBON	2.2K	5%	1/6W	
R125	1-247-869-00	CARBON	39K	5%	1/6W	
R126	1-247-831-00	CARBON	1K	5%	1/6W	
R127	1-247-853-00	CARBON	8.2K	5%	1/6W	
R128	1-247-855-00	CARBON	10K	5%	1/6W	
R129	1-247-820-00	CARBON	360	5%	1/6W	
R130	1-247-819-00	CARBON	330	5%	1/6W	
R131	1-247-799-00	CARBON	47	5%	1/6W	
R132 ⚠	1-211-608-00	CARBON	56	5%	1/2W	F
R133	1-247-823-00	CARBON	470	5%	1/6W	
R134	1-247-826-00	CARBON	620	5%	1/6W	
R135	1-246-417-00	CARBON	4.7	5%	1/4W	
R136	1-247-807-00	CARBON	100	5%	1/6W	
R137	1-247-857-00	CARBON	12K	5%	1/6W	
R138	1-247-827-00	CARBON	680	5%	1/6W	
R139	1-247-807-00	CARBON	100	5%	1/6W	
R140	1-247-807-00	CARBON	100	5%	1/6W	
R141	1-247-831-00	CARBON	1K	5%	1/6W	
R142	1-247-849-00	CARBON	5.6K	5%	1/6W	
R143	1-247-857-00	CARBON	12K	5%	1/6W	
R144	1-247-871-00	CARBON	47K	5%	1/6W	
R145	1-247-850-00	CARBON	6.2K	5%	1/6W	
R146	1-247-842-00	CARBON	3K	5%	1/6W	
R147	1-247-857-00	CARBON	12K	5%	1/6W	
R148	1-247-871-00	CARBON	47K	5%	1/6W	
R149	1-247-850-00	CARBON	6.2K	5%	1/6W	

Ref.No	Part No.	Description				Remark
R150	1-247-842-00	CARBON	3K	5%	1/6W	
R201	1-247-855-00	CARBON	10K	5%	1/6W	
R202	1-247-879-00	CARBON	100K	5%	1/6W	
R203	1-247-879-00	CARBON	100K	5%	1/6W	
R204	1-247-886-00	CARBON	200K	5%	1/6W	
R205	1-247-873-00	CARBON	56K	5%	1/6W	
R206	1-247-855-00	CARBON	10K	5%	1/6W	
R207	1-247-883-00	CARBON	150K	5%	1/6W	
R208	1-247-866-00	CARBON	30K	5%	1/6W	
R209	1-247-831-00	CARBON	1K	5%	1/6W	
R210	1-247-879-00	CARBON	100K	5%	1/6W	
R211	1-247-871-00	CARBON	47K	5%	1/6W	
R212	1-247-859-00	CARBON	15K	5%	1/6W	
R213 ⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R301	1-247-807-00	CARBON	100	5%	1/6W	
R302	1-247-879-00	CARBON	100K	5%	1/6W	
R303	1-247-855-00	CARBON	10K	5%	1/6W	
R304	1-247-863-00	CARBON	22K	5%	1/6W	
R305	1-247-843-00	CARBON	3.3K	5%	1/6W	
R306	1-247-859-00	CARBON	15K	5%	1/6W	
R307	1-247-819-00	CARBON	330	5%	1/6W	
R308	1-247-848-00	CARBON	5.1K	5%	1/6W	
R309	1-247-848-00	CARBON	5.1K	5%	1/6W	
R310	1-247-848-00	CARBON	5.1K	5%	1/6W	
R311	1-247-896-00	CARBON	510K	5%	1/6W	
R312	1-247-848-00	CARBON	5.1K	5%	1/6W	
R313	1-247-848-00	CARBON	5.1K	5%	1/6W	
R314	1-247-896-00	CARBON	510K	5%	1/6W	

VARIABLE RESISTOR

RV001	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV002	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV003	1-228-745-00	RES, ADJ, CARBON 1K
RV004	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV101	1-228-990-11	RES, ADJ, METAL GLAZE 1K
RV102	1-228-990-11	RES, ADJ, METAL GLAZE 1K
RV301	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K

TRANSFORMER

T101	1-427-546-11	TRANSFORMER, I/O
T102	1-427-546-11	TRANSFORMER, I/O

THERMISTOR

TH203	1-806-718-11	THER STOR S-10K

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♠:A-6713-200-A	AF-3 BOARD, COMPLETE **********************
♠:3-684-072-01	LID, BOTTOM, AF SHIELD CASE(S)
♠:3-684-087-01	CASE (S) (MAIN), SHIELD, AF

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
		B.P.F			
BPF001	1-235-367-11	B.P.F			
BPF002	1-235-367-11	B.P.F			
BPF003	1-235-366-11	B.P.F			
BPF004	1-235-366-11	B.P.F			
		CAPACITOR			
C001	1-123-356-00	ELECT	10MF	20%	16V
C002	1-161-025-00	CERAMIC	0.1MF	10%	25V
C003	1-161-025-00	CERAMIC	0.1MF	10%	25V
C004	1-161-025-00	CERAMIC	0.1MF	10%	25V
C006	1-161-025-00	CERAMIC	0.1MF	10%	25V
C007	1-123-332-00	ELECT	47MF	20%	16V
C008	1-161-025-00	CERAMIC	0.1MF	10%	25V
C010	1-123-306-00	ELECT	47MF	20%	10V
C011	1-123-306-00	ELECT	47MF	20%	10V
C012	1-161-025-00	CERAMIC	0.1MF	10%	25V
C013	1-123-294-00	ELECT	47MF	20%	6.3V
C014	1-161-025-00	CERAMIC	0.1MF	10%	25V
C015	1-161-025-00	CERAMIC	0.1MF	10%	25V
C016	1-102-519-00	CERAMIC	36PF	5%	50V
C017	1-161-025-00	CERAMIC	0.1MF	10%	25V
C018	1-123-332-00	ELECT	47MF	20%	16V
C020	1-161-025-00	CERAMIC	0.1MF	10%	25V
C021	1-161-025-00	CERAMIC	0.1MF	10%	25V
C023	1-123-356-00	ELECT	10MF	20%	16V
C025	1-102-973-00	CERAMIC	100PF	5%	50V
C026	1-101-884-00	CERAMIC	56PF	5%	50V
C027	1-161-025-00	CERAMIC	0.1MF	10%	25V
C028	1-123-353-00	ELECT	2.2MF	20%	50V
C030	1-123-353-00	ELECT	2.2MF	20%	50V
C031	1-123-332-00	ELECT	47MF	20%	16V
C032	1-161-025-00	CERAMIC	0.1MF	10%	25V
C033	1-161-025-00	CERAMIC	0.1MF	10%	25V
C034	1-102-519-00	CERAMIC	36PF	5%	50V
C035	1-161-025-00	CERAMIC	0.1MF	10%	25V
C036	1-161-025-00	CERAMIC	0.1MF	10%	25V
C038	1-102-973-00	CERAMIC	100PF	5%	50V
C039	1-101-884-00	CERAMIC	56PF	5%	50V
C041	1-123-356-00	ELECT	10MF	20%	16V
C042	1-123-333-00	ELECT	100MF	20%	16V
C046	1-161-025-00	CERAMIC	0.1MF	10%	25V
C048	1-123-333-00	ELECT	100MF	20%	16V
C050	1-161-025-00	CERAMIC	0.1MF	10%	25V
C051	1-161-025-00	CERAMIC	0.1MF	10%	25V
C052	1-161-025-00	CERAMIC	0.1MF	10%	25V
C053	1-161-025-00	CERAMIC	0.1MF	10%	25V
C054	1-102-822-00	CERAMIC	390PF	5%	50V
C055	1-161-025-00	CERAMIC	0.1MF	10%	25V
C057	1-102-973-00	CERAMIC	100PF	5%	50V
C058	1-101-884-00	CERAMIC	56PF	5%	50V
C059	1-123-356-00	ELECT	10MF	20%	16V
C060	1-123-353-00	ELECT	2.2MF	20%	50V
C062	1-123-353-00	ELECT	2.2MF	20%	50V
C063	1-161-025-00	CERAMIC	0.1MF	10%	25V
C064	1-161-025-00	CERAMIC	0.1MF	10%	25V
C065	1-161-025-00	CERAMIC	0.1MF	10%	25V
C069	1-123-332-00	ELECT	47MF	20%	16V
C070	1-161-025-00	CERAMIC	0.1MF	10%	25V
C071	1-161-025-00	CERAMIC	0.1MF	10%	25V
C072	1-102-822-00	CERAMIC	390PF	5%	50V
C073	1-161-025-00	CERAMIC	0.1MF	10%	25V
C075	1-102-973-00	CERAMIC	100PF	5%	50V
C076	1-101-884-00	CERAMIC	56PF	5%	50V
C078	1-123-333-00	ELECT	100MF	20%	16V
C080	1-161-025-00	CERAMIC	0.1MF	10%	25V
C081	1-108-561-00	MYLAR	0.0018MF	5%	50V
C082	1-108-565-00	MYLAR	0.0027MF	5%	50V
C083	1-108-569-00	MYLAR	0.0039MF	5%	50V
C084	1-123-356-00	ELECT	10MF	20%	16V
C086	1-123-307-00	ELECT	0.1MF	10%	25V
C087	1-161-031-00	CERAMIC	0.01MF	10%	25V
C088	1-123-307-00	CERAMIC	100MF	20%	10V
C089	1-123-332-00	ELECT	47MF	20%	16V
C090	1-123-332-00	ELECT	47MF	20%	16V
C091	1-123-356-00	ELECT	10MF	20%	16V
C092	1-102-958-00	CERAMIC	20PF	5%	50V
C093	1-130-485-00	MYLAR	0.015MF	5%	50V
C095	1-130-485-00	MYLAR	0.015MF	5%	50V
C096	1-130-494-11	MYLAR	0.082MF	5%	50V
C098	1-130-475-00	MYLAR	0.0022MF	5%	50V
C099	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C100	1-130-469-00	MYLAR	680PF	5%	50V
C101	1-108-590-00	MYLAR	0.03MF	5%	50V
C102	1-131-383-00	TANTALUM	10MF	10%	6.3V
C103	1-131-347-00	TANTALUM	1MF	20%	16V
C105	1-123-307-00	ELECT	100MF	20%	10V
C106	1-161-013-00	CERAMIC	0.01MF	10%	25V
C107	1-130-497-00	MYLAR	0.15MF	5%	50V
C109	1-108-569-00	MYLAR	0.0039MF	5%	50V
C110	1-108-565-00	MYLAR	0.0027MF	5%	50V
C111	1-108-561-00	MYLAR	0.0018MF	5%	50V
C115	1-123-356-00	ELECT	10MF	20%	16V
C116	1-123-307-00	ELECT	100MF	20%	10V
C117	1-123-332-00	ELECT	47MF	20%	16V
C118	1-123-332-00	ELECT	47MF	20%	16V
C119	1-102-958-00	CERAMIC	20PF	5%	50V
C120	1-130-485-00	MYLAR	0.015MF	5%	50V
C121	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C122	1-130-469-00	MYLAR	680PF	5%	50V
C123	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C124	1-130-497-00	MYLAR	0.15MF	5%	50V
C125	1-131-383-00	TANTALUM	10MF	10%	6.3V
C126	1-131-347-00	TANTALUM	1MF	20%	16V
C127	1-108-590-00	MYLAR	0.03MF	5%	50V

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description			Remark
C128	1-130-475-00	MYLAR	0.0022MF	5%	50V
C130	1-130-494-11	MYLAR	0.082MF	5%	50V
C131	1-130-485-00	MYLAR	0.015MF	5%	50V
C132	1-123-356-00	ELECT	10MF	20%	16V
C133	1-161-013-00	CERAMIC	0.01MF	10%	25V
C134	1-123-330-00	ELECT	22MF	20%	16V
C143	1-123-332-00	ELECT	47MF	20%	16V
C144	1-123-330-00	ELECT	22MF	20%	16V
C146	1-123-332-00	ELECT	47MF	20%	16V
C147	1-123-330-00	ELECT	22MF	20%	16V
C150	1-123-332-00	ELECT	47MF	20%	16V
C151	1-123-381-00	ELECT	2.2MF	20%	50V
C152	1-102-973-00	CERAMIC	100PF	5%	50V
C153	1-123-332-00	ELECT	47MF	20%	16V
C154	1-123-381-00	ELECT	2.2MF	20%	50V
C155	1-102-973-00	CERAMIC	100PF	5%	50V
C156	1-123-330-00	ELECT	22MF	20%	16V
C157	1-123-330-00	ELECT	22MF	20%	16V
C158	1-123-330-00	ELECT	22MF	20%	16V
C159	1-123-318-00	ELECT	33MF	20%	16V
C160	1-123-332-00	ELECT	47MF	20%	16V
C161	1-123-330-00	ELECT	22MF	20%	16V
C162	1-123-318-00	ELECT	33MF	20%	16V
C163	1-123-356-00	ELECT	10MF	20%	16V
C164	1-123-356-00	ELECT	10MF	20%	16V
C165	1-123-330-00	ELECT	22MF	20%	16V
C166	1-123-356-00	ELECT	10MF	20%	16V
C167	1-123-380-00	ELECT	1MF	20%	50V
C168	1-123-356-00	ELECT	10MF	20%	16V
C169	1-123-330-00	ELECT	22MF	20%	16V
C170	1-123-380-00	ELECT	1MF	20%	50V
C171	1-161-025-00	CERAMIC	0.1MF	10%	25V
C173	1-161-013-00	CERAMIC	0.01MF	10%	25V
C175	1-123-332-00	ELECT	47MF	20%	16V
C176	1-102-976-00	CERAMIC	180PF	5%	50V
C177	1-161-013-00	CERAMIC	0.01MF	10%	25V
C178	1-102-522-00	CERAMIC	51PF	5%	50V
C179	1-102-978-00	CERAMIC	220PF	5%	50V
C180	1-102-978-00	CERAMIC	220PF	5%	50V
C181	1-161-013-00	CERAMIC	0.01MF	10%	25V
C182	1-123-332-00	ELECT	47MF	20%	16V
C183	1-123-332-00	ELECT	47MF	20%	16V
C184	1-102-529-00	CERAMIC	100PF	5%	50V
C185	1-123-332-00	ELECT	47MF	20%	16V
C186	1-123-332-00	ELECT	47MF	20%	16V
C187	1-161-025-00	CERAMIC	0.1MF	10%	25V
C189	1-161-025-00	CERAMIC	0.1MF	10%	25V
C190	1-123-332-00	ELECT	47MF	20%	16V
C191	1-161-025-00	CERAMIC	0.1MF	10%	25V
C192	1-123-332-00	ELECT	47MF	20%	16V
C193	1-102-529-00	CERAMIC	100PF	5%	50V
C194	1-123-332-00	ELECT	47MF	20%	16V
C195	1-123-332-00	ELECT	47MF	20%	16V
C196	1-123-332-00	ELECT	47MF	20%	16V
C197	1-102-625-61	CERAMIC	100PF	5%	50V
C198	1-161-013-00	CERAMIC	0.01MF	10%	25V
C199	1-102-517-00	CERAMIC	30PF	5%	50V
C200	1-102-531-00	CERAMIC	150PF	5%	50V
C201	1-102-531-00	CERAMIC	150PF	5%	50V
C202	1-161-013-00	CERAMIC	0.01MF	10%	25V
C203	1-161-013-00	CERAMIC	0.01MF	10%	25V
C208	1-161-025-00	CERAMIC	0.1MF	10%	25V
C209	1-123-356-00	ELECT	10MF	20%	16V
C211	1-123-332-00	ELECT	47MF	20%	16V
C213	1-123-332-00	ELECT	47MF	20%	16V
C216	1-123-381-00	ELECT	2.2MF	20%	50V
C217	1-123-381-00	ELECT	2.2MF	20%	50V
C221	1-123-330-00	ELECT	22MF	20%	16V
C222	1-123-330-00	ELECT	22MF	20%	16V
C223	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C224	1-123-380-00	ELECT	1MF	20%	50V
C225	1-161-013-00	CERAMIC	0.01MF	10%	25V
C226	1-161-013-00	CERAMIC	0.01MF	10%	25V
C227	1-161-013-00	CERAMIC	0.01MF	10%	25V
C229	1-130-471-00	MYLAR	0.001MF	5%	50V
C232	1-130-471-00	MYLAR	0.001MF	5%	50V
C235	1-161-013-00	CERAMIC	0.01MF	10%	25V
C236	1-130-491-00	MYLAR	0.047MF	5%	50V
C237	1-130-491-00	MYLAR	0.047MF	5%	50V
C238	1-123-330-00	ELECT	22MF	20%	16V
C240	1-161-025-00	CERAMIC	0.1MF	10%	25V
C241	1-123-356-00	ELECT	10MF	20%	16V
C501	1-124-233-00	ELECT	10MF	20%	16V
C701	1-123-356-00	ELECT	10MF	20%	16V
C702	1-123-356-00	ELECT	10MF	20%	16V
C704	1-123-322-00	ELECT	330MF	20%	16V
C706	1-124-231-00	ELECT	4.7MF	20%	16V
C709	1-123-381-00	ELECT	2.2MF	20%	50V
C710	1-130-469-00	MYLAR	680PF	5%	50V
C711	1-130-469-00	MYLAR	680PF	5%	50V
C712	1-123-332-00	ELECT	47MF	20%	16V
C713	1-123-332-00	ELECT	47MF	20%	16V
C714	1-130-469-00	MYLAR	680PF	5%	50V
C715	1-130-469-00	MYLAR	680PF	5%	50V
C722	1-124-231-00	ELECT	4.7MF	20%	16V
C724	1-123-380-00	ELECT	1MF	20%	50V
C725	1-123-380-00	ELECT	1MF	20%	50V
C726	1-161-039-00	CERAMIC	0.001MF	10%	25V
C727	1-102-824-00	CERAMIC	470PF	5%	50V
C728	1-102-824-00	CERAMIC	470PF	5%	50V
C730	1-161-013-00	CERAMIC	0.01MF	10%	25V
C731	1-123-332-00	ELECT	47MF	20%	16V
C732	1-123-332-00	ELECT	47MF	20%	16V
C733	1-161-013-00	CERAMIC	0.01MF	10%	25V
C734	1-124-168-00	ELECT	100MF	20%	16V
C735	1-123-353-00	ELECT	2.2MF	20%	50V

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
C736	1-123-353-00	ELECT 2.2MF 20%	50V
C737	1-161-017-00	CERAMIC 0.022MF 10%	25V
C738	1-123-356-00	ELECT 10MF 20%	16V
C739	1-161-019-00	CERAMIC 0.033MF 10%	25V
C740	1-123-307-00	ELECT 100MF 20%	10V

CONNECTOR

Ref.No	Part No.	Description	Remark
CN001	♠:1-560-892-00	PIN, CONNECTOR 4P	
CN002	♠:1-560-891-00	PIN, CONNECTOR 3P	
CN003	♠:1-560-898-00	PIN, CONNECTOR 10P	
CN004	♠:1-560-896-00	PIN, CONNECTOR 8P	
CN005	♠:1-560-893-00	PIN, CONNECTOR 5P	
CN006	♠:1-560-892-00	PIN, CONNECTOR 4P	
CN007	♠:1-560-892-00	PIN, CONNECTOR 4P	
CN008	♠:1-560-897-00	PIN, CONNECTOR 9P	
CN009	♠:1-560-891-00	PIN, CONNECTOR 3P	
CN011	♠:1-560-900-00	PIN, CONNECTOR 12P	
CN012	♠:1-560-890-00	PIN, CONNECTOR 2P	

DIODE

Ref.No	Part No.	Description	Remark
D007	8-719-911-19	DIODE 1SS119	
D008	8-719-911-19	DIODE 1SS119	
D011	8-719-000-12	DIODE MC931	
D013	8-719-000-12	DIODE MC931	
D017	=>8-719-911-19	DIODE 1SS119	
D019	=>8-719-911-19	DIODE 1SS119	
D025	8-719-162-07	DIODE RD6.2E-B	
D027	=>8-719-911-19	DIODE 1SS119	
D504	8-719-911-19	DIODE 1SS119	
D505	8-719-156-07	DIODE RD5.6E-B	
D508	8-719-162-07	DIODE RD6.2E-B	
D509	8-719-812-33	DIODE TLG123A	
D510	8-719-812-33	DIODE TLG123A	
D511	8-719-812-33	DIODE TLG123A	
D512	8-719-812-33	DIODE TLG123A	
D514	8-719-911-19	DIODE 1SS119	
D515	8-719-911-19	DIODE 1SS119	
D516	8-719-911-19	DIODE 1SS119	
D517	8-719-911-19	DIODE 1SS119	
D521	8-719-911-19	DIODE 1SS119	
D522	8-719-911-19	DIODE 1SS119	
D523	8-719-911-19	DIODE 1SS119	
D524	8-719-812-33	DIODE TLG123A	
D525	8-719-175-07	DIODE RD7.5E-B	
D526	8-719-175-07	DIODE RD7.5E-B	
D527	8-719-911-19	DIODE 1SS119	
D528	8-719-911-19	DIODE 1SS119	
D529	8-719-911-19	DIODE 1SS119	
D530	8-719-911-19	DIODE 1SS119	
D531	8-719-911-19	DIODE 1SS119	

IC

Ref.No	Part No.	Description	Remark
IC001	8-759-324-12	IC HA12412	
IC002	8-759-324-12	IC HA12412	
IC003	8-759-101-67	IC UPC1167C2	
IC004	8-759-101-67	IC UPC1167C2	
IC005	8-759-103-93	IC UPC393C	
IC006	8-759-990-82	IC TL082CP	
IC007	8-759-990-82	IC TL082CP	
IC008	8-759-240-66	IC TC4066BP	
IC009	8-759-240-66	IC TC4066BP	
IC010	8-759-400-04	IC AN6120	
IC011	8-759-400-04	IC AN6120	
IC012	8-752-009-70	IC CX20097	
IC013	8-759-700-62	IC NJM4562D	
IC014	8-759-240-52	IC TC4052BP	
IC015	8-759-700-62	IC NJM4562D	
IC016	8-752-006-10	IC CX20061	
IC017	8-752-006-10	IC CX20061	
IC018	8-759-240-93	IC TC4093BP	
IC019	8-759-240-01	IC TC4001BP	
IC020	8-759-910-68	IC MB88201-152G	

COIL

Ref.No	Part No.	Description	Remark
L001	1-408-421-00	MICRO INDUCTOR 100UH	
L002	1-408-413-00	MICRO INDUCTOR 22UH	
L003	1-410-079-11	COIL, PHASE SIFT 33UH	
L004	1-410-079-11	COIL, PHASE SIFT 33UH	
L005	1-410-079-11	COIL, PHASE SIFT 33UH	
L007	1-408-415-00	MICRO INDUCTOR 33UH	
L008	1-408-418-00	MICRO INDUCTOR 56UH	
L010	1-408-413-00	MICRO INDUCTOR 22UH	
L011	1-408-416-00	MICRO INDUCTOR 39UH	
L012	1-410-079-11	COIL, PHASE SIFT 33UH	
L013	1-408-413-00	MICRO INDUCTOR 22UH	
L014	1-408-413-00	MICRO INDUCTOR 22UH	
L015	1-408-413-00	MICRO INDUCTOR 22UH	
L016	1-408-413-00	MICRO INDUCTOR 22UH	
L020	1-408-417-00	MICRO INDUCTOR 47UH	
L021	1-408-417-00	MICRO INDUCTOR 47UH	
L022	1-408-417-00	MICRO INDUCTOR 47UH	

L.P.F

Ref.No	Part No.	Description	Remark
LPF001	1-235-365-11	L.P.F	
LPF002	1-235-365-11	L.P.F	

IC LINK

Ref.No	Part No.	Description	Remark
PS001	⚠.1-532-605-11	LINK. IC (N-10 0.4A)	

TRANSISTOR

Ref.No	Part No.	Description	Remark
Q001	⚠.8-729-113-33	TRANSISTOR 2SB733-4	
Q002	=>8-729-245-83	TRANSISTOR 2SC2458	
Q003	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q004	=>8-729-245-83	TRANSISTOR 2SC2458	
Q007	=>8-729-177-43	TRANSISTOR 2SD774	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark
Q008	8-729-603-50	TRANSISTOR 2SC403SP	
Q009	8-729-603-50	TRANSISTOR 2SC403SP	
Q010	8-729-106-07	TRANSISTOR 2SK514-H	
Q012	8-729-965-22	TRANSISTOR 2SC1652	
Q013	8-729-603-50	TRANSISTOR 2SC403SP	
Q015	8-729-106-07	TRANSISTOR 2SK514-H	
Q016	8-729-603-50	TRANSISTOR 2SC403SP	
Q017	=>8-729-245-83	TRANSISTOR 2SC2458	
Q018	8-729-117-54	TRANSISTOR 2SA1175	
Q019	=>8-729-245-83	TRANSISTOR 2SC2458	
Q020	=>8-729-245-83	TRANSISTOR 2SC2458	
Q021	=>8-729-245-83	TRANSISTOR 2SC2458	
Q022	=>8-729-245-83	TRANSISTOR 2SC2458	
Q023	=>8-729-245-83	TRANSISTOR 2SC2458	
Q024	=>8-729-245-83	TRANSISTOR 2SC2458	
Q030	=>8-729-245-83	TRANSISTOR 2SC2458	
Q031	=>8-729-245-83	TRANSISTOR 2SC2458	
Q032	8-729-965-22	TRANSISTOR 2SC1652	
Q034	8-729-965-22	TRANSISTOR 2SC1652	
Q035	8-729-965-22	TRANSISTOR 2SC1652	
Q036	8-729-965-22	TRANSISTOR 2SC1652	
Q037	=>8-729-245-83	TRANSISTOR 2SC2458	
Q038	=>8-729-245-83	TRANSISTOR 2SC2458	
Q044	8-729-965-22	TRANSISTOR 2SC1652	
Q046	=>8-729-245-83	TRANSISTOR 2SC2458	
Q049	8-729-900-89	TRANSISTOR DTC144ES	
Q701	=>8-729-245-83	TRANSISTOR 2SC2458	
Q703	=>8-729-245-83	TRANSISTOR 2SC2458	
Q704	=>8-729-245-83	TRANSISTOR 2SC2458	
Q705	=>8-729-245-83	TRANSISTOR 2SC2458	
Q706	8-729-965-22	TRANSISTOR 2SC1652	
Q707	8-729-993-72	TRANSISTOR 2SA937	
Q708	=>8-729-245-83	TRANSISTOR 2SC2458	
Q709	8-729-117-54	TRANSISTOR 2SA1175	
Q710	8-729-117-54	TRANSISTOR 2SA1175	
Q711	=>8-729-245-83	TRANSISTOR 2SC2458	
Q712	8-729-117-54	TRANSISTOR 2SA1175	
Q713	8-729-117-54	TRANSISTOR 2SA1175	
Q714	8-729-384-48	TRANSISTOR 2SA844	
Q715	8-729-384-48	TRANSISTOR 2SA844	
Q716	=>8-729-245-83	TRANSISTOR 2SC2458	
Q720	8-729-117-54	TRANSISTOR 2SA1175	
Q721	=>8-729-245-83	TRANSISTOR 2SC2458	
Q722	=>8-729-245-83	TRANSISTOR 2SC2458	
Q723	8-729-900-33	TRANSISTOR DTC144EF	
Q724	=>8-729-245-83	TRANSISTOR 2SC2458	
Q725	8-729-117-54	TRANSISTOR 2SA1175	

RESISTOR

Ref.No	Part No.	Description				Remark
R001	1-247-807-00	CARBON	100	5%	1/6W	
R002	1-247-847-00	CARBON	4.7K	5%	1/6W	
R003	1-247-831-00	CARBON	1K	5%	1/6W	
R004	1-247-867-00	CARBON	33K	5%	1/6W	
R005	1-247-867-00	CARBON	33K	5%	1/6W	
R006	1-247-823-00	CARBON	470	5%	1/6W	
R007	1-247-873-00	CARBON	56K	5%	1/6W	
R008	1-247-855-00	CARBON	10K	5%	1/6W	
R012	1-247-867-00	CARBON	33K	5%	1/6W	
R013	1-247-855-00	CARBON	10K	5%	1/6W	
R014	1-247-855-00	CARBON	10K	5%	1/6W	
R026	1-247-823-00	CARBON	470	5%	1/6W	
R027	1-247-861-00	CARBON	18K	5%	1/6W	
R028	1-247-831-00	CARBON	1K	5%	1/6W	
R029	1-247-825-00	CARBON	560	5%	1/6W	
R030	1-247-815-00	CARBON	220	5%	1/6W	
R031	1-247-822-00	CARBON	430	5%	1/6W	
R033	1-247-809-00	CARBON	120	5%	1/6W	
R034	1-247-839-00	CARBON	2.2K	5%	1/6W	
R035	⚠1-212-853-00	FUSIBLE	6.8	5%	1/4W	F
R036	1-247-855-00	CARBON	10K	5%	1/6W	
R037	1-247-823-00	CARBON	470	5%	1/6W	
R038	1-247-855-00	CARBON	10K	5%	1/6W	
R039	1-247-855-00	CARBON	10K	5%	1/6W	
R040	1-247-855-00	CARBON	10K	5%	1/6W	
R042	1-247-855-00	CARBON	10K	5%	1/6W	
R043	1-247-855-00	CARBON	10K	5%	1/6W	
R044	1-247-823-00	CARBON	470	5%	1/6W	
R045	1-247-861-00	CARBON	18K	5%	1/6W	
R046	1-247-831-00	CARBON	1K	5%	1/6W	
R047	1-247-825-00	CARBON	560	5%	1/6W	
R048	1-247-847-00	CARBON	4.7K	5%	1/6W	
R049	1-247-815-00	CARBON	220	5%	1/6W	
R050	1-247-822-00	CARBON	430	5%	1/6W	
R052	1-247-809-00	CARBON	120	5%	1/6W	
R054	1-247-855-00	CARBON	10K	5%	1/6W	
R055	1-247-855-00	CARBON	10K	5%	1/6W	
R056	1-247-855-00	CARBON	10K	5%	1/6W	
R057	1-247-855-00	CARBON	10K	5%	1/6W	
R061	1-247-831-00	CARBON	1K	5%	1/6W	
R069	1-247-839-00	CARBON	2.2K	5%	1/6W	
R071	1-247-855-00	CARBON	10K	5%	1/6W	
R072	1-247-867-00	CARBON	33K	5%	1/6W	
R073	1-247-831-00	CARBON	1K	5%	1/6W	
R074	1-247-867-00	CARBON	33K	5%	1/6W	
R078	1-247-823-00	CARBON	470	5%	1/6W	
R079	1-247-831-00	CARBON	1K	5%	1/6W	
R080	1-247-825-00	CARBON	560	5%	1/6W	
R081	1-247-813-00	CARBON	180	5%	1/6W	
R082	1-247-815-00	CARBON	220	5%	1/6W	
R083	1-247-822-00	CARBON	430	5%	1/6W	
R085	1-247-814-00	CARBON	200	5%	1/6W	
R087	1-247-855-00	CARBON	10K	5%	1/6W	
R088	1-247-855-00	CARBON	10K	5%	1/6W	
R089	1-247-855-00	CARBON	10K	5%	1/6W	
R090	1-247-823-00	CARBON	470	5%	1/6W	
R091	1-247-855-00	CARBON	10K	5%	1/6W	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R093	1-247-831-00	CARBON	1K	5%	1/6W	
R099	1-247-838-00	CARBON	2K	5%	1/6W	
R105	1-247-839-00	CARBON	2.2K	5%	1/6W	
R106	1-247-823-00	CARBON	470	5%	1/6W	
R107	1-247-831-00	CARBON	1K	5%	1/6W	
R108	1-247-825-00	CARBON	560	5%	1/6W	
R110	1-247-839-00	CARBON	2.2K	5%	1/6W	
R111	1-247-867-00	CARBON	33K	5%	1/6W	
R112	1-247-855-00	CARBON	10K	5%	1/6W	
R113	1-247-815-00	CARBON	220	5%	1/6W	
R115	1-247-822-00	CARBON	430	5%	1/6W	
R116	1-247-814-00	CARBON	200	5%	1/6W	
R117	1-247-855-00	CARBON	10K	5%	1/6W	
R118	1-247-855-00	CARBON	10K	5%	1/6W	
R119	1-247-855-00	CARBON	10K	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R121	1-247-867-00	CARBON	33K	5%	1/6W	
R122	1-247-807-00	CARBON	100	5%	1/6W	
R123	1-247-863-00	CARBON	22K	5%	1/6W	
R124	1-247-863-00	CARBON	22K	5%	1/6W	
R125	1-247-863-00	CARBON	22K	5%	1/6W	
R126	1-247-839-00	CARBON	2.2K	5%	1/6W	
R127	1-247-863-00	CARBON	22K	5%	1/6W	
R128	1-247-863-00	CARBON	22K	5%	1/6W	
R129	1-247-863-00	CARBON	22K	5%	1/6W	
R130	1-247-839-00	CARBON	2.2K	5%	1/6W	
R132	1-247-855-00	CARBON	10K	5%	1/6W	
R133	1-247-859-00	CARBON	15K	5%	1/6W	
R134	1-247-840-00	CARBON	2.4K	5%	1/6W	
R135	1-247-824-00	CARBON	510	5%	1/6W	
R136	1-247-855-00	CARBON	10K	5%	1/6W	
R137	1-247-855-00	CARBON	10K	5%	1/6W	
R138	1-247-822-00	CARBON	430	5%	1/6W	
R139	1-247-842-00	CARBON	3K	5%	1/6W	
R140	1-247-858-00	CARBON	13K	5%	1/6W	
R141	1-247-858-00	CARBON	13K	5%	1/6W	
R142	1-247-838-00	CARBON	2K	5%	1/6W	
R143	1-247-842-00	CARBON	3K	5%	1/6W	
R144	1-247-895-00	CARBON	470K	5%	1/6W	
R146	1-247-849-00	CARBON	5.6K	5%	1/6W	
R147	1-247-865-00	CARBON	27K	5%	1/6W	
R148	1-247-848-00	CARBON	5.1K	5%	1/6W	
R149	1-247-828-00	CARBON	750	5%	1/6W	
R150	1-247-814-00	CARBON	200	5%	1/6W	
R151	1-247-851-00	CARBON	6.8K	5%	1/6W	
R152	1-247-847-00	CARBON	4.7K	5%	1/6W	
R157	1-247-855-00	CARBON	10K	5%	1/6W	
R158	1-247-859-00	CARBON	15K	5%	1/6W	
R159	1-247-840-00	CARBON	2.4K	5%	1/6W	
R160	1-247-824-00	CARBON	510	5%	1/6W	
R161	1-247-855-00	CARBON	10K	5%	1/6W	
R162	1-247-843-00	CARBON	3.3K	5%	1/6W	
R163	1-247-855-00	CARBON	10K	5%	1/6W	

Ref.No	Part No.	Description				Remark
R164	1-247-855-00	CARBON	10K	5%	1/6W	
R165	1-247-842-00	CARBON	3K	5%	1/6W	
R166	1-247-822-00	CARBON	430	5%	1/6W	
R167	1-247-858-00	CARBON	13K	5%	1/6W	
R168	1-247-838-00	CARBON	2K	5%	1/6W	
R169	1-247-858-00	CARBON	13K	5%	1/6W	
R170	1-247-842-00	CARBON	3K	5%	1/6W	
R172	1-247-865-00	CARBON	27K	5%	1/6W	
R173	1-247-895-00	CARBON	470K	5%	1/6W	
R174	1-247-849-00	CARBON	5.6K	5%	1/6W	
R175	1-247-836-00	CARBON	1.6K	5%	1/6W	
R176	1-247-814-00	CARBON	200	5%	1/6W	
R177	1-247-848-00	CARBON	5.1K	5%	1/6W	
R178	1-247-828-00	CARBON	750	5%	1/6W	
R179 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R180	1-215-465-00	METAL	68K	1%	1/6W	
R181	1-215-446-00	METAL	11K	1%	1/6W	
R183	1-215-462-00	METAL	51K	1%	1/6W	
R184	1-215-462-00	METAL	51K	1%	1/6W	
R185	1-247-871-00	CARBON	47K	5%	1/6W	
R190	1-215-446-00	METAL	11K	1%	1/6W	
R191	1-215-465-00	METAL	68K	1%	1/6W	
R194	1-247-872-00	CARBON	51K	5%	1/6W	
R200	1-247-872-00	CARBON	51K	5%	1/6W	
R205	1-247-855-00	CARBON	10K	5%	1/6W	
R206	1-247-859-00	CARBON	15K	5%	1/6W	
R217 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R218	1-247-871-00	CARBON	47K	5%	1/6W	
R220	1-247-875-00	CARBON	68K	5%	1/6W	
R221	1-247-850-00	CARBON	6.2K	5%	1/6W	
R222	1-247-863-00	CARBON	22K	5%	1/6W	
R223	1-247-831-00	CARBON	1K	5%	1/6W	
R224	1-247-887-00	CARBON	220K	5%	1/6W	
R225	1-247-842-00	CARBON	3K	5%	1/6W	
R226	1-247-879-00	CARBON	100K	5%	1/6W	
R227	1-247-855-00	CARBON	10K	5%	1/6W	
R228	1-247-879-00	CARBON	100K	5%	1/6W	
R229	1-247-831-00	CARBON	1K	5%	1/6W	
R230	1-247-887-00	CARBON	220K	5%	1/6W	
R231	1-247-842-00	CARBON	3K	5%	1/6W	
R232	1-247-848-00	CARBON	5.1K	5%	1/6W	
R233	1-247-848-00	CARBON	5.1K	5%	1/6W	
R234 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R235	1-247-871-00	CARBON	47K	5%	1/6W	
R236	1-247-871-00	CARBON	47K	5%	1/6W	
R237	1-247-839-00	CARBON	2.2K	5%	1/6W	
R239	1-247-863-00	CARBON	22K	5%	1/6W	
R240	1-247-871-00	CARBON	47K	5%	1/6W	
R241	1-247-875-00	CARBON	68K	5%	1/6W	
R243	1-247-850-00	CARBON	6.2K	5%	1/6W	
R244	1-247-855-00	CARBON	10K	5%	1/6W	
R245	1-247-855-00	CARBON	10K	5%	1/6W	
R246	1-247-855-00	CARBON	10K	5%	1/6W	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

AF-3

Ref.No	Part No.	Description				Remark
R247	1-247-855-00	CARBON	10K	5%	1/6W	
R248	1-247-863-00	CARBON	22K	5%	1/6W	
R249	1-247-855-00	CARBON	10K	5%	1/6W	
R253	1-247-855-00	CARBON	10K	5%	1/6W	
R255	1-247-867-00	CARBON	33K	5%	1/6W	
R256	1-247-863-00	CARBON	22K	5%	1/6W	
R262	1-247-851-00	CARBON	6.8K	5%	1/6W	
R263	1-247-823-00	CARBON	470	5%	1/6W	
R264	1-247-861-00	CARBON	18K	5%	1/6W	
R265	1-247-861-00	CARBON	18K	5%	1/6W	
R266	1-247-807-00	CARBON	100	5%	1/6W	
R267	1-215-442-00	METAL	7.5K	1%	1/6W	
R268	1-247-844-00	CARBON	3.6K	5%	1/6W	
R269	1-247-855-00	CARBON	10K	5%	1/6W	
R270	1-247-855-00	CARBON	10K	5%	1/6W	
R271	1-247-875-00	CARBON	68K	5%	1/6W	
R272	1-247-871-00	CARBON	47K	5%	1/6W	
R273	1-247-871-00	CARBON	47K	5%	1/6W	
R275	1-247-851-00	CARBON	6.8K	5%	1/6W	
R276	1-247-823-00	CARBON	470	5%	1/6W	
R277	1-247-861-00	CARBON	18K	5%	1/6W	
R278	1-247-861-00	CARBON	18K	5%	1/6W	
R279	1-247-807-00	CARBON	100	5%	1/6W	
R280	1-215-421-00	METAL	1K	1%	1/6W	
R281	1-247-844-00	CARBON	3.6K	5%	1/6W	
R282	1-247-855-00	CARBON	10K	5%	1/6W	
R283	1-247-855-00	CARBON	10K	5%	1/6W	
R284	1-247-869-00	CARBON	39K	5%	1/6W	
R285	1-247-871-00	CARBON	47K	5%	1/6W	
R286	1-247-871-00	CARBON	47K	5%	1/6W	
R288	1-215-453-00	METAL	22K	1%	1/6W	
R289	1-215-453-00	METAL	22K	1%	1/6W	
R290	1-247-807-00	CARBON	100	5%	1/6W	
R291	1-247-831-00	CARBON	1K	5%	1/6W	
R293	1-247-867-00	CARBON	33K	5%	1/6W	
R296	1-247-867-00	CARBON	33K	5%	1/6W	
R297	1-247-848-00	CARBON	5.1K	5%	1/6W	
R298	1-247-863-00	CARBON	22K	5%	1/6W	
R299	1-247-863-00	CARBON	22K	5%	1/6W	
R300	1-247-863-00	CARBON	22K	5%	1/6W	
R301	1-247-855-00	CARBON	10K	5%	1/6W	
R302	1-247-855-00	CARBON	10K	5%	1/6W	
R303	1-247-871-00	CARBON	47K	5%	1/6W	
R304	1-247-855-00	CARBON	10K	5%	1/6W	
R308	1-247-863-00	CARBON	22K	5%	1/6W	
R310	1-247-847-00	CARBON	4.7K	5%	1/6W	
R311	1-247-855-00	CARBON	10K	5%	1/6W	
R312	1-247-843-00	CARBON	3.3K	5%	1/6W	
R313	1-247-855-00	CARBON	10K	5%	1/6W	
R315	1-247-855-00	CARBON	10K	5%	1/6W	
R322	1-247-879-00	CARBON	100K	5%	1/6W	
R323	1-247-839-00	CARBON	2.2K	5%	1/6W	
R324	1-247-871-00	CARBON	47K	5%	1/6W	
R325	1-247-879-00	CARBON	100K	5%	1/6W	
R326	1-247-831-00	CARBON	1K	5%	1/6W	
R327	1-247-859-00	CARBON	15K	5%	1/6W	
R330	1-247-838-00	CARBON	2K	5%	1/6W	
R332	1-247-862-00	CARBON	20K	5%	1/6W	
R338	1-247-862-00	CARBON	20K	5%	1/6W	
R343	1-247-807-00	CARBON	100	5%	1/6W	
R344	1-247-807-00	CARBON	100	5%	1/6W	
R345	1-247-820-00	CARBON	360	5%	1/6W	
R346	1-247-820-00	CARBON	360	5%	1/6W	
R350	1-247-843-00	CARBON	3.3K	5%	1/6W	
R351	1-247-843-00	CARBON	3.3K	5%	1/6W	
R352	1-247-857-00	CARBON	12K	5%	1/6W	
R601	1-247-871-00	CARBON	47K	5%	1/6W	
R701	1-247-855-00	CARBON	10K	5%	1/6W	
R702	1-247-855-00	CARBON	10K	5%	1/6W	
R703	1-247-847-00	CARBON	4.7K	5%	1/6W	
R706	1-247-843-00	CARBON	3.3K	5%	1/6W	
R707	1-247-847-00	CARBON	4.7K	5%	1/6W	
R708	1-247-843-00	CARBON	3.3K	5%	1/6W	
R711	1-247-867-00	CARBON	33K	5%	1/6W	
R712	1-247-867-00	CARBON	33K	5%	1/6W	
R713	1-247-855-00	CARBON	10K	5%	1/6W	
R714	1-247-867-00	CARBON	33K	5%	1/6W	
R715	1-247-867-00	CARBON	33K	5%	1/6W	
R716	1-247-855-00	CARBON	10K	5%	1/6W	
R718	1-247-849-00	CARBON	5.6K	5%	1/6W	
R719	1-247-849-00	CARBON	5.6K	5%	1/6W	
R720	1-247-849-00	CARBON	5.6K	5%	1/6W	
R721	1-247-849-00	CARBON	5.6K	5%	1/6W	
R722	1-247-867-00	CARBON	33K	5%	1/6W	
R724	1-247-867-00	CARBON	33K	5%	1/6W	
R725	1-247-855-00	CARBON	10K	5%	1/6W	
R726	1-247-867-00	CARBON	33K	5%	1/6W	
R727	1-247-867-00	CARBON	33K	5%	1/6W	
R728	1-247-855-00	CARBON	10K	5%	1/6W	
R729	1-247-839-00	CARBON	2.2K	5%	1/6W	
R730	1-247-813-00	CARBON	180	5%	1/6W	
R731	1-247-813-00	CARBON	180	5%	1/6W	
R732	1-247-867-00	CARBON	33K	5%	1/6W	
R734	1-247-812-00	CARBON	160	5%	1/6W	
R735	1-247-812-00	CARBON	160	5%	1/6W	
R736	1-247-867-00	CARBON	33K	5%	1/6W	
R737	1-247-821-00	CARBON	390	5%	1/6W	
R739	1-247-863-00	CARBON	22K	5%	1/6W	
R740	1-247-863-00	CARBON	22K	5%	1/6W	
R741	1-247-855-00	CARBON	10K	5%	1/6W	
R742	1-247-859-00	CARBON	15K	5%	1/6W	
R743	1-247-859-00	CARBON	15K	5%	1/6W	
R744	1-247-847-00	CARBON	4.7K	5%	1/6W	
R745	1-247-847-00	CARBON	4.7K	5%	1/6W	
R746	1-247-855-00	CARBON	10K	5%	1/6W	
R747	1-247-855-00	CARBON	10K	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R748	1-247-843-00	CARBON	3.3K	5%	1/6W	
R749	1-247-843-00	CARBON	3.3K	5%	1/6W	
R750	1-247-871-00	CARBON	47K	5%	1/6W	
R751	1-247-871-00	CARBON	47K	5%	1/6W	
R754	1-247-903-00	CARBON	1M	5%	1/6W	
R755	1-247-903-00	CARBON	1M	5%	1/6W	
R756	1-247-837-00	CARBON	1.8K	5%	1/6W	
R757	1-247-837-00	CARBON	1.8K	5%	1/6W	
R758	1-247-807-00	CARBON	100	5%	1/6W	
R759	1-247-807-00	CARBON	100	5%	1/6W	
R780	1-247-825-00	CARBON	560	5%	1/6W	
R781	1-247-825-00	CARBON	560	5%	1/6W	
R782	1-247-867-00	CARBON	33K	5%	1/6W	
R783	1-247-867-00	CARBON	33K	5%	1/6W	
R784	1-247-825-00	CARBON	560	5%	1/6W	
R785	1-247-825-00	CARBON	560	5%	1/6W	
R786	1-247-855-00	CARBON	10K	5%	1/6W	
R787	1-247-855-00	CARBON	10K	5%	1/6W	
R788 ⚠.	1-247-831-00	CARBON	1K	5%	1/6W	
R789	1-247-896-00	CARBON	510K	5%	1/6W	
R790	1-247-879-00	CARBON	100K	5%	1/6W	
R793	1-247-879-00	CARBON	100K	5%	1/6W	
R794	1-247-847-00	CARBON	4.7K	5%	1/6W	
R795	1-247-847-00	CARBON	4.7K	5%	1/6W	
R796	1-247-839-00	CARBON	2.2K	5%	1/6W	
R797	1-247-839-00	CARBON	2.2K	5%	1/6W	
R798	1-247-803-00	CARBON	68	5%	1/6W	
R799	1-247-831-00	CARBON	1K	5%	1/6W	
R800	1-247-831-00	CARBON	1K	5%	1/6W	
R801 ⚠.	1-247-815-00	CARBON	220	5%	1/6W	
R802 ⚠.	1-247-815-00	CARBON	220	5%	1/6W	
R803	1-247-875-00	CARBON	68K	5%	1/6W	
R804	1-247-855-00	CARBON	10K	5%	1/6W	
R805	1-247-855-00	CARBON	10K	5%	1/6W	
R806	1-247-855-00	CARBON	10K	5%	1/6W	
R807	1-247-815-00	CARBON	220	5%	1/6W	
R808	1-247-815-00	CARBON	220	5%	1/6W	
R809	1-247-813-00	CARBON	180	5%	1/6W	
R810	1-247-855-00	CARBON	10K	5%	1/6W	
R811	1-247-855-00	CARBON	10K	5%	1/6W	
R812	1-247-855-00	CARBON	10K	5%	1/6W	
R813	1-247-855-00	CARBON	10K	5%	1/6W	
R814	1-247-855-00	CARBON	10K	5%	1/6W	
R815	1-247-855-00	CARBON	10K	5%	1/6W	
R816	1-247-895-00	CARBON	470K	5%	1/6W	
R817	1-247-879-00	CARBON	100K	5%	1/6W	

VARIABLE RESISTOR

Ref.No	Part No.	Description	Remark
RV005	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV006	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV010	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV012	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV013	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV014	1-228-990-00	RES, ADJ, METAL GLAZE 1K	
RV015	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K	
RV016	1-228-990-00	RES, ADJ, METAL GLAZE 1K	
RV017	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K	
RV018	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV019	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV020	1-228-997-00	RES, ADJ, METAL GLAZE 100K	
RV021	1-228-997-00	RES, ADJ, METAL GLAZE 100K	
RV022	1-228-997-00	RES, ADJ, METAL GLAZE 100K	
RV023	1-228-997-00	RES, ADJ, METAL GLAZE 100K	

Q DET COIL

Ref.No	Part No.	Description	Remark
T002	1-404-545-11	COIL, Q DET	
T004	1-404-545-11	COIL, Q DET	
T006	1-404-544-11	COIL, Q DET	
T008	1-404-544-11	COIL, Q DET	

POST PIN

Ref.No	Part No.	Description	Remark
TP001	1-536-354-00	POST PIN	
TP002	1-536-354-00	POST PIN	
TP003	1-536-354-00	POST PIN	
TP004	1-536-354-00	POST PIN	
TP005	1-536-354-00	POST PIN	
TP006	1-536-354-00	POST PIN	
TP007	1-536-354-00	POST PIN	
TP008	1-536-354-00	POST PIN	
TP009	1-536-354-00	POST PIN	
TP010	1-536-354-00	POST PIN	
TP011	1-536-354-00	POST PIN	
TP012	1-536-354-00	POST PIN	

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♠:A-6713-203-A AM-5 BOARD, COMPLETE

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♠:3-684-075-01 CASE (MAIN), SHIELD, AM
♠:3-684-076-01 LID, UPPER, AM SHIELD CASE
♠:3-684-077-03 LID, BOTTOM, AM SHIELD CASE

CAPACITOR

Ref.No	Part No.	Description				Remark
C501	1-123-356-00	ELECT	10MF	20%	16V	
C505	1-123-330-00	ELECT	22MF	20%	16V	
C506	1-123-333-00	ELECT	100MF	20%	16V	
C507	1-123-333-00	ELECT	100MF	20%	16V	
C508	1-123-328-00	ELECT	4.7MF	20%	25V	
C509	1-123-328-00	ELECT	4.7MF	20%	25V	
C510	1-130-497-00	MYLAR	0.15MF	5%	50V	
C511	1-130-486-51	MYLAR	0.018MF	5%	50V	
C512	1-123-333-00	ELECT	100MF	20%	16V	
C513	1-123-379-00	ELECT	0.47MF	20%	50V	
C514	1-123-330-00	ELECT	22MF	20%	16V	
C515	1-102-111-00	CERAMIC	270PF	10%	50V	
C516	1-123-354-00	ELECT	3.3MF	20%	50V	
C517	1-130-507-51	MYLAR	0.0018MF	10%	50V	
C518	1-123-305-00	ELECT	33MF	20%	10V	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

AM-5

Ref.No	Part No.	Description			Remark
C519	1-130-516-51	MYLAR	0.01MF	10%	50V
C520	1-123-354-00	ELECT	3.3MF	20%	50V
C521	1-123-328-00	ELECT	4.7MF	20%	25V
C522	1-123-333-00	ELECT	100MF	20%	16V
C524	1-127-475-00	ELECT(SOLID)	0.22MF	5%	25V
C525	1-130-502-00	MYLAR	680PF	10%	50V
C526	1-123-332-00	ELECT	47MF	20%	16V
C527	1-130-479-00	MYLAR	0.0047MF	5%	50V
C528	1-130-477-00	MYLAR	0.0033MF	5%	50V
C529	1-129-709-00	FILM	0.0039MF	10%	630V
C530	1-102-108-00	CERAMIC	150PF	10%	50V
C531	1-123-333-00	ELECT	100MF	20%	16V
C533	1-130-518-51	MYLAR	0.015MF	10%	50V
C534	1-123-332-00	ELECT	47MF	20%	16V
C535	1-102-111-00	CERAMIC	270PF	10%	50V
C536	1-123-379-00	ELECT	0.47MF	20%	50V
C537	1-123-333-00	ELECT	100MF	20%	16V
C539	1-123-356-00	ELECT	10MF	20%	16V

CONNECTOR

Ref.No	Part No.	Description
CN501●:	1-560-893-00	PIN, CONNECTOR 5P
CN502●:	1-560-893-00	PIN, CONNECTOR 5P
CN503●:	1-564-030-00	PIN, CONNECTOR 5P

TRIMMER

Ref.No	Part No.	Description
CT501	1-141-215-00	CAP, TRIMAR

DIODE

Ref.No	Part No.	Description
D506	8-719-911-19	DIODE 1SS119
D507	=>8-719-200-02	DIODE 10E2
D508	8-719-812-31	DIODE TLR123

IC

Ref.No	Part No.	Description
IC501	8-759-800-79	IC LA7048

COIL

Ref.No	Part No.	Description
L501	1-407-963-00	MICRO INDUCTOR 15MMH
L502	1-407-508-00	MICRO INDUCTOR 22MMH
L503	1-407-710-00	MICRO INDUCTOR 270UH
L504	1-407-508-00	MICRO INDUCTOR 22MMH

TRANSISTOR

Ref.No	Part No.	Description
Q501	8-729-988-12	TRANSISTOR 2SA881
Q502	=>8-729-245-83	TRANSISTOR 2SC2458
Q504	8-729-967-32	TRANSISTOR 2SC2673
Q505	8-729-663-47	TRANSISTOR 2SC945-P
Q506	8-729-663-47	TRANSISTOR 2SC945-P
Q507	=>8-729-204-83	TRANSISTOR 2SA1048-GR
Q508	=>8-729-245-83	TRANSISTOR 2SC2458
Q509	=>8-729-245-83	TRANSISTOR 2SC2458
Q510	=>8-729-245-83	TRANSISTOR 2SC2458
Q511	=>8-729-245-83	TRANSISTOR 2SC2458
Q512	=>8-729-245-83	TRANSISTOR 2SC2458
Q513	=>8-729-245-83	TRANSISTOR 2SC2458

RESISTOR

Ref.No	Part No.	Description				Remark
R503	1-247-839-00	CARBON	2.2K	5%	1/6W	
R504	1-247-863-00	CARBON	22K	5%	1/6W	
R505	1-247-871-00	CARBON	47K	5%	1/6W	
R506	⚠.1-247-660-00	CARBON	82	5%	1/4W	F
R507	1-247-847-00	CARBON	4.7K	5%	1/6W	
R508	1-247-867-00	CARBON	33K	5%	1/6W	
R509	1-247-847-00	CARBON	4.7K	5%	1/6W	
R510	1-247-855-00	CARBON	10K	5%	1/6W	
R511	1-247-867-00	CARBON	33K	5%	1/6W	
R512	⚠.1-247-819-00	CARBON	330	5%	1/6W	
R513	1-247-855-00	CARBON	10K	5%	1/6W	
R514	1-247-903-00	CARBON	1M	5%	1/6W	
R515	1-247-849-00	CARBON	5.6K	5%	1/6W	
R516	1-247-819-00	CARBON	330	5%	1/6W	
R517	1-210-825-00	SOLID	3.3M	5%	1/4W	
R518	1-247-851-00	CARBON	6.8K	5%	1/6W	
R519	1-247-859-00	CARBON	15K	5%	1/6W	
R520	1-247-819-00	CARBON	330	5%	1/6W	
R521	1-247-891-00	CARBON	330K	5%	1/6W	
R522	1-247-883-00	CARBON	150K	5%	1/6W	
R524	1-247-783-00	CARBON	10	5%	1/6W	
R526	1-247-863-00	CARBON	22K	5%	1/6W	
R528	1-247-853-00	CARBON	8.2K	5%	1/6W	
R530	1-247-849-00	CARBON	5.6K	5%	1/6W	
R531	1-247-829-00	CARBON	820	5%	1/6W	
R532	1-247-862-00	CARBON	20K	5%	1/6W	
R533	⚠.1-246-980-00	CARBON	3.3	5%	1/8W	F
R534	1-247-839-00	CARBON	2.2K	5%	1/6W	
R535	1-247-839-00	CARBON	2.2K	5%	1/6W	
R536	1-247-849-00	CARBON	5.6K	5%	1/6W	
R537	1-247-855-00	CARBON	10K	5%	1/6W	
R538	1-247-863-00	CARBON	22K	5%	1/6W	
R539	1-247-831-00	CARBON	1K	5%	1/6W	
R540	1-247-838-00	CARBON	2K	5%	1/6W	
R541	1-247-877-00	CARBON	82K	5%	1/6W	
R542	1-247-865-00	CARBON	27K	5%	1/6W	
R543	1-247-871-00	CARBON	47K	5%	1/6W	
R545	1-247-871-00	CARBON	47K	5%	1/6W	
R546	1-247-841-00	CARBON	2.7K	5%	1/6W	
R547	1-247-863-00	CARBON	22K	5%	1/6W	
R548	1-247-843-00	CARBON	3.3K	5%	1/6W	
R550	1-247-875-00	CARBON	68K	5%	1/6W	
R551	1-247-855-00	CARBON	10K	5%	1/6W	
R552	1-247-783-00	CARBON	10	5%	1/6W	
R561	1-247-840-00	CARBON	2.4K	5%	1/6W	
R562	1-247-855-00	CARBON	10K	5%	1/6W	
R563	1-247-895-00	CARBON	470K	5%	1/6W	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

VARIABLE RESISTOR

Ref.No	Part No.	Description	Remark
RV501	1-228-748-00	RES, ADJ, CARBON 10K	
RV502	⚠.1-228-989-00	RES, ADJ, METAL GLAZE 470	
RV503	1-228-751-00	RES, ADJ, CARBON 100K	

TRANSFORMER

T501	1-433-237-00	TRANSFORMER, OSCILLATOR

POST PIN

TP510	1-536-354-00	POST PIN
TP513	1-536-354-00	POST PIN

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♠:A-6715-224-A SS-28 BOARD, COMPLETE
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CAPACITOR

Ref.No	Part No.	Description			Remark
C001	1-123-380-00	ELECT	1MF	20%	50V
C002	1-123-356-00	ELECT	10MF	20%	16V
C003	1-161-021-00	CERAMIC	0.047MF	10%	25V
C004	1-123-333-00	ELECT	100MF	20%	16V
C005	1-161-013-00	CERAMIC	0.01MF	10%	25V
C006	1-123-305-00	ELECT	33MF	20%	10V
C007	1-123-328-00	ELECT	4.7MF	20%	25V
C008	1-161-021-00	CERAMIC	0.047MF	10%	25V
C009	1-161-021-00	CERAMIC	0.047MF	10%	25V
C301	1-123-354-00	ELECT	3.3MF	20%	50V
C302	1-161-021-00	CERAMIC	0.047MF	10%	25V
C305	1-123-354-00	ELECT	3.3MF	20%	50V
C306	1-161-021-00	CERAMIC	0.047MF	10%	25V
C307	1-130-482-00	MYLAR	0.0082MF	5%	50V
C308	1-130-516-00	MYLAR	0.01MF	10%	50V
C309	1-130-516-00	MYLAR	0.01MF	10%	50V
C310	1-161-016-00	CERAMIC	0.018MF	10%	25V
C311	1-161-016-00	CERAMIC	0.018MF	10%	25V
C312	1-123-330-00	ELECT	22MF	20%	16V
C314	1-161-016-00	CERAMIC	0.018MF	10%	25V
C315	1-161-013-00	CERAMIC	0.01MF	10%	25V
C316	1-123-356-00	ELECT	10MF	20%	16V
C317	1-123-380-00	ELECT	1MF	20%	50V
C318	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C319	1-161-021-00	CERAMIC	0.047MF	10%	25V
C320	1-124-429-00	ELECT	0.68MF	20%	50V
C321	1-161-021-00	CERAMIC	0.047MF	10%	25V
C322	1-161-021-00	CERAMIC	0.047MF	10%	25V
C323	1-123-354-00	ELECT	3.3MF	20%	50V
C324	1-127-476-00	ELECT(SOLID)	0.33MF	5%	25V
C326	1-123-310-00	ELECT	470MF	20%	10V
C327	1-123-308-00	ELECT	220MF	20%	10V
C328	1-161-021-00	CERAMIC	0.047MF	10%	25V
C329	1-131-357-00	TANTALUM	4.7MF	20%	25V
C330	1-123-381-00	ELECT	2.2MF	20%	50V

Ref.No	Part No.	Description			Remark
C331	1-123-381-00	ELECT	2.2MF	20%	50V
C332	1-161-021-00	CERAMIC	0.047MF	10%	25V
C333	1-131-357-00	TANTALUM	4.7MF	20%	25V
C334	1-102-106-00	CERAMIC	100PF	10%	50V
C335	1-123-333-00	ELECT	100MF	20%	16V
C336	1-123-333-00	ELECT	100MF	20%	16V
C337	1-130-479-00	MYLAR	0.0047MF	5%	50V
C338	1-123-332-00	ELECT	47MF	20%	16V
C339	1-161-021-00	CERAMIC	0.047MF	10%	25V
C340	1-123-381-00	ELECT	2.2MF	20%	50V
C341	1-123-306-00	ELECT	47MF	20%	10V
C342	1-123-306-00	ELECT	47MF	20%	10V
C343	1-161-016-00	CERAMIC	0.018MF	10%	25V
C344	1-161-013-00	CERAMIC	0.01MF	10%	25V
C345	1-161-017-00	CERAMIC	0.022MF	10%	25V
C346	1-161-002-00	CERAMIC	0.0012MF	10%	25V
C347	1-161-016-00	CERAMIC	0.018MF	10%	25V
C348	1-161-013-00	CERAMIC	0.01MF	10%	25V
C349	1-123-354-00	ELECT	3.3MF	20%	50V
C350	1-127-479-00	ELECT(SOLID)	1MF	5%	25V
C351	1-161-019-00	CERAMIC	0.033MF	10%	25V
C352	1-123-330-00	ELECT	22MF	20%	16V
C353	1-161-019-00	CERAMIC	0.033MF	10%	25V
C354	1-123-328-00	ELECT	4.7MF	20%	25V
C355	1-161-013-00	CERAMIC	0.01MF	10%	25V
C356	1-123-332-00	ELECT	47MF	20%	16V
C357	1-161-013-00	CERAMIC	0.01MF	10%	25V
C358	1-161-013-00	CERAMIC	0.01MF	10%	25V
C359	1-123-328-00	ELECT	4.7MF	20%	25V
C360	1-123-333-00	ELECT	100MF	20%	16V
C361	1-161-013-00	CERAMIC	0.01MF	10%	25V
C362	1-130-493-00	MYLAR	0.068MF	5%	50V
C601	1-129-794-00	FILM	0.0033MF	5%	100V
C602	1-129-794-00	FILM	0.0033MF	5%	100V
C603	1-130-524-00	MYLAR	0.047MF	10%	50V
C604	1-130-520-00	MYLAR	0.022MF	10%	50V
C605	1-130-524-00	MYLAR	0.047MF	10%	50V
C606	1-123-330-00	ELECT	22MF	20%	16V
C607	1-123-331-00	ELECT	33MF	20%	25V
C608	1-123-331-00	ELECT	33MF	20%	25V
C610	1-123-380-00	ELECT	1MF	20%	50V
C611	1-123-306-00	ELECT	47MF	20%	10V
C612	1-161-021-00	CERAMIC	0.047MF	10%	25V
C801	1-102-529-00	CERAMIC	100PF	5%	50V
C802	1-102-529-00	CERAMIC	100PF	5%	50V
C901	1-101-004-00	CARAMIC	0.01MF		50V

FILTER

CF601	1-527-822-00	OSCILLATOR, CERAMIC

CONNECTOR

CN001	♠:1-560-891-00	PIN, CONNECTOR 3P

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

SS-28

Ref.No	Part No.	Description	Remark
CN002	●:1-560-891-00	PIN, CONNECTOR 3P	
CN003	●:1-560-892-00	PIN, CONNECTOR 4P	
CN004	●:1-560-890-00	PIN, CONNECTOR 2P	
CN301	●:1-560-892-00	PIN, CONNECTOR 4P	
CN302	●:1-560-892-00	PIN, CONNECTOR 4P	
CN303	●:1-560-890-00	PIN, CONNECTOR 2P	
CN304	●:1-560-890-00	PIN, CONNECTOR 2P	
CN305	●:1-560-897-00	PIN, CONNECTOR 9P	
CN306	●:1-560-895-00	PIN, CONNECTOR 7P	
CN307	●:1-560-466-00	PIN, CONNECTOR 3P	
CN308	●:1-560-894-00	PIN, CONNECTOR 6P	
CN309	●:1-560-892-00	PIN, CONNECTOR 4P	
CN601	●:1-560-895-00	PIN, CONNECTOR 7P	
CN602	●:1-560-897-00	PIN, CONNECTOR 9P	
CN603	●:1-560-890-00	PIN, CONNECTOR 2P	
CN604	●:1-560-890-00	PIN, CONNECTOR 2P	
CN605	●:1-560-890-00	PIN, CONNECTOR 2P	
CN606	●:1-560-892-00	PIN, CONNECTOR 4P	
CN607	●:1-560-890-00	PIN, CONNECTOR 2P	
CN608	●:1-560-892-00	PIN, CONNECTOR 4P	
CN609	●:1-560-893-00	PIN, CONNECTOR 5P	
CN610	●:1-560-891-00	PIN, CONNECTOR 3P	
CN611	●:1-560-891-00	PIN, CONNECTOR 3P	
CN612	●:1-560-896-00	PIN, CONNECTOR 8P	
CN613	●:1-560-895-00	PIN, CONNECTOR 7P	
CN614	●:1-560-897-00	PIN, CONNECTOR 9P	
CN615	●:1-560-893-00	PIN, CONNECTOR 5P	

DIODE

Ref.No	Part No.	Description	Remark
D001	8-719-000-06	DIODE MC921	
D002	8-719-911-19	DIODE 1SS119	
D003	8-719-911-19	DIODE 1SS119	
D004	8-719-911-19	DIODE 1SS119	
D005	8-719-200-02	DIODE 10E2	
D006	8-719-911-19	DIODE 1SS119	
D007	8-719-911-19	DIODE 1SS119	
D008	8-719-911-19	DIODE 1SS119	
D009	8-719-911-19	DIODE 1SS119	
D010	8-719-911-19	DIODE 1SS119	
D011	8-719-911-19	DIODE 1SS119	
D012	8-719-911-19	DIODE 1SS119	
D303	⚠.8-719-100-57	DIODE RD10E-B2	
D304	⚠.8-719-162-07	DIODE RD6.2E-B	
D305	8-719-911-19	DIODE 1SS119	
D306	8-719-000-04	DIODE MC911	
D307	8-719-812-31	DIODE TLR123	
D308	8-719-000-06	DIODE MC921	
D309	8-719-911-19	DIODE 1SS119	
D310	8-719-000-12	DIODE MC931	
D311	8-719-000-06	DIODE MC921	
D312	8-719-911-06	DIODE 1SS106	
D313	8-719-911-06	DIODE 1SS106	
D601	8-719-911-19	DIODE 1SS119	
D602	8-719-000-06	DIODE MC921	
D603	8-719-911-19	DIODE 1SS119	
D604	8-719-911-19	DIODE 1SS119	
D605	8-719-911-19	DIODE 1SS119	
D606	8-719-911-19	DIODE 1SS119	
D607	8-719-911-19	DIODE 1SS119	
D608	8-719-911-19	DIODE 1SS119	

IC

Ref.No	Part No.	Description	Remark
IC001	8-759-135-80	IC UPC358C	
IC301	=>8-751-941-05	IC CX194B-5	
IC302	8-759-135-80	IC UPC358C	
IC303	8-759-145-58	IC UPC4558C	
IC304	8-759-132-40	IC UPC324C	
IC305	8-759-240-53	IC TC4053BP	
IC306	8-759-132-40	IC UPC324C	
IC307	8-759-240-53	IC TC4053BP	
IC601	8-759-910-55	IC MB88421-141M	
IC602	8-759-800-72	IC LA7205	

COIL

Ref.No	Part No.	Description	Remark
L601	1-408-418-00	MICRO INDUCTOR 56UH	

IC LINK

Ref.No	Part No.	Description	Remark
PS001	⚠.1-532-637-11	LINK, IC (N-25 1A)	
PS002	⚠.1-532-679-11	LINK, IC (N-15 0.6A)	
PS003	⚠.1-532-605-11	LINK, IC (N-10 0.4A)	

TRANSISTOR

Ref.No	Part No.	Description	Remark
Q001	=>8-729-245-83	TRANSISTOR 2SC2458	
Q002	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q003	=>8-729-245-83	TRANSISTOR 2SC2458	
Q004	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q005	=>8-729-245-83	TRANSISTOR 2SC2458	
Q006	=>8-729-245-83	TRANSISTOR 2SC2458	
Q007	=>8-729-245-83	TRANSISTOR 2SC2458	
Q008	=>8-729-245-83	TRANSISTOR 2SC2458	
Q009	=>8-729-245-83	TRANSISTOR 2SC2458	
Q010	=>8-729-245-83	TRANSISTOR 2SC2458	
Q011	=>8-729-245-83	TRANSISTOR 2SC2458	
Q012	=>8-729-245-83	TRANSISTOR 2SC2458	
Q013	=>8-729-245-83	TRANSISTOR 2SC2458	
Q014	=>8-729-245-83	TRANSISTOR 2SC2458	
Q015	=>8-729-245-83	TRANSISTOR 2SC2458	
Q016	=>8-729-245-83	TRANSISTOR 2SC2458	
Q017	=>8-729-245-83	TRANSISTOR 2SC2458	
Q018	=>8-729-245-83	TRANSISTOR 2SC2458	
Q020	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q021	=>8-729-177-32	TRANSISTOR 2SD773	
Q022	=>8-729-245-83	TRANSISTOR 2SC2458	
Q023	=>8-729-245-83	TRANSISTOR 2SC2458	
Q024	=>8-729-245-83	TRANSISTOR 2SC2458	
Q025	=>8-729-245-83	TRANSISTOR 2SC2458	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
Q026	=>8-729-245-83	TRANSISTOR 2SC2458	
Q027	=>8-729-245-83	TRANSISTOR 2SC2458	
Q028	8-729-374-02	TRANSISTOR 2SB740	
Q029	=>8-729-177-43	TRANSISTOR 2SD774	
Q030	8-729-374-02	TRANSISTOR 2SB740	
Q031	=>8-729-177-43	TRANSISTOR 2SD774	
Q032	=>8-729-245-83	TRANSISTOR 2SC2458	
Q033	=>8-729-245-83	TRANSISTOR 2SC2458	
Q034	=>8-729-245-83	TRANSISTOR 2SC2458	
Q035	=>8-729-245-83	TRANSISTOR 2SC2458	
Q036	=>8-729-245-83	TRANSISTOR 2SC2458	
Q037	=>8-729-245-83	TRANSISTOR 2SC2458	
Q038	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q301	=>8-729-177-43	TRANSISTOR 2SD774	
Q302	=>8-729-245-83	TRANSISTOR 2SC2458	
Q305	=>8-729-245-83	TRANSISTOR 2SC2458	
Q306	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q307	=>8-729-245-83	TRANSISTOR 2SC2458	
Q308	=>8-729-245-83	TRANSISTOR 2SC2458	
Q309	=>8-729-245-83	TRANSISTOR 2SC2458	
Q310	=>8-729-245-83	TRANSISTOR 2SC2458	
Q311	=>8-729-245-83	TRANSISTOR 2SC2458	
Q312	=>8-729-245-83	TRANSISTOR 2SC2458	
Q313	=>8-729-245-83	TRANSISTOR 2SC2458	
Q314	=>8-729-245-83	TRANSISTOR 2SC2458	
Q315	=>8-729-245-83	TRANSISTOR 2SC2458	
Q316	=>8-729-245-83	TRANSISTOR 2SC2458	
Q317	=>8-729-245-83	TRANSISTOR 2SC2458	
Q318	=>8-729-245-83	TRANSISTOR 2SC2458	
Q319	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q320	=>8-729-177-43	TRANSISTOR 2SD774	
Q321	⚠.8-729-117-52	TRANSISTOR 2SA1175	
Q322	⚠.8-729-805-13	TRANSISTOR 2SC1475-13	
Q323	=>8-729-245-83	TRANSISTOR 2SC2458	
Q324	=>8-729-245-83	TRANSISTOR 2SC2458	
Q325	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q326	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q327	=>8-729-245-83	TRANSISTOR 2SC2458	
Q328	=>8-729-245-83	TRANSISTOR 2SC2458	
Q330	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q601	=>8-729-245-83	TRANSISTOR 2SC2458	
Q602	8-729-900-89	TRANSISTOR DTC144ES	
Q603	8-729-900-89	TRANSISTOR DTC144ES	
Q604	=>8-729-177-43	TRANSISTOR 2SD774	
Q605	8-729-116-42	TRANSISTOR 2SD1164	
Q606	8-729-900-89	TRANSISTOR DTC144ES	
Q607	8-729-900-89	TRANSISTOR DTC144ES	
Q608	=>8-729-177-43	TRANSISTOR 2SD774	
Q609	8-729-116-42	TRANSISTOR 2SD1164	
Q610	8-729-900-89	TRANSISTOR DTC144ES	
Q611	=>8-729-245-83	TRANSISTOR 2SC2458	
Q612	=>8-729-245-83	TRANSISTOR 2SC2458	
Q613	=>8-729-245-83	TRANSISTOR 2SC2458	

Ref.No	Part No.	Description	Remark
Q614	8-729-900-89	TRANSISTOR DTC144ES	
Q615	8-729-987-42	TRANSISTOR 2SA874	
Q616	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q617	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q618	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q619	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q620	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q621	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q622	=>8-729-245-83	TRANSISTOR 2SC2458	
Q623	=>8-729-245-83	TRANSISTOR 2SC2458	
Q624	=>8-729-245-83	TRANSISTOR 2SC2458	
Q901	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

Ref.No	Part No.	Description				Remark
R001	1-247-871-00	CARBON	47K	5%	1/6W	
R002	1-247-855-00	CARBON	10K	5%	1/6W	
R003	1-247-863-00	CARBON	22K	5%	1/6W	
R004	1-246-467-00	CARBON	560	5%	1/4W	
R005	1-246-470-00	CARBON	750	5%	1/4W	
R006	1-247-855-00	CARBON	10K	5%	1/6W	
R007	1-247-871-00	CARBON	47K	5%	1/6W	
R008	1-247-855-00	CARBON	10K	5%	1/6W	
R009	1-247-871-00	CARBON	47K	5%	1/6W	
R010	1-247-871-00	CARBON	47K	5%	1/6W	
R011	1-247-871-00	CARBON	47K	5%	1/6W	
R012	1-247-850-00	CARBON	6.2K	5%	1/6W	
R013	1-247-853-00	CARBON	8.2K	5%	1/6W	
R014	1-247-871-00	CARBON	47K	5%	1/6W	
R016	1-247-859-00	CARBON	15K	5%	1/6W	
R017	1-247-871-00	CARBON	47K	5%	1/6W	
R018	1-247-871-00	CARBON	47K	5%	1/6W	
R019	1-247-865-00	CARBON	27K	5%	1/6W	
R020	1-247-831-00	CARBON	1K	5%	1/6W	
R021	1-247-855-00	CARBON	10K	5%	1/6W	
R022	1-247-847-00	CARBON	4.7K	5%	1/6W	
R023	1-247-871-00	CARBON	47K	5%	1/6W	
R024	1-247-871-00	CARBON	47K	5%	1/6W	
R025	1-246-469-00	CARBON	680	5%	1/4W	
R026	1-247-879-00	CARBON	100K	5%	1/6W	
R027	1-247-855-00	CARBON	10K	5%	1/6W	
R028	1-247-831-00	CARBON	1K	5%	1/6W	
R029	1-247-863-00	CARBON	22K	5%	1/6W	
R030	1-247-863-00	CARBON	22K	5%	1/6W	
R031	1-247-875-00	CARBON	68K	5%	1/6W	
R032	1-247-871-00	CARBON	47K	5%	1/6W	
R033	⚠.1-212-366-00	METAL OXIDE	3.3	5%	1W	F
R034	⚠.1-247-819-00	CARBON	330	5%	1/6W	
R035	1-247-871-00	CARBON	47K	5%	1/6W	
R036	1-247-871-00	CARBON	47K	5%	1/6W	
R037	1-247-855-00	CARBON	10K	5%	1/6W	
R037	1-247-855-00	CARBON	10K	5%	1/6W	
R038	1-247-863-00	CARBON	22K	5%	1/6W	
R039	1-247-863-00	CARBON	22K	5%	1/6W	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R040	1-247-859-00	CARBON	15K	5%	1/6W	
R041	1-247-855-00	CARBON	10K	5%	1/6W	
R042	1-247-863-00	CARBON	22K	5%	1/6W	
R043	1-247-865-00	CARBON	27K	5%	1/6W	
R044	1-247-855-00	CARBON	10K	5%	1/6W	
R045	1-247-871-00	CARBON	47K	5%	1/6W	
R046	1-247-863-00	CARBON	22K	5%	1/6W	
R047	1-247-855-00	CARBON	10K	5%	1/6W	
R048	1-247-845-00	CARBON	3.9K	5%	1/6W	
R049	1-247-831-00	CARBON	1K	5%	1/6W	
R050	1-247-873-00	CARBON	56K	5%	1/6W	
R051	1-247-831-00	CARBON	1K	5%	1/6W	
R052	1-247-869-00	CARBON	39K	5%	1/6W	
R053	1-247-871-00	CARBON	47K	5%	1/6W	
R054	1-247-855-00	CARBON	10K	5%	1/6W	
R055	1-247-871-00	CARBON	47K	5%	1/6W	
R056	1-247-871-00	CARBON	47K	5%	1/6W	
R057	1-247-855-00	CARBON	10K	5%	1/6W	
R058	1-247-871-00	CARBON	47K	5%	1/6W	
R059	1-247-871-00	CARBON	47K	5%	1/6W	
R060	1-247-855-00	CARBON	10K	5%	1/6W	
R061	1-247-863-00	CARBON	22K	5%	1/6W	
R062	1-247-863-00	CARBON	22K	5%	1/6W	
R063	1-244-865-00	CARBON	470	5%	1/2W	
R064	1-247-849-00	CARBON	5.6K	5%	1/6W	
R065	1-247-831-00	CARBON	1K	5%	1/6W	
R066 ⚠	1-212-360-00	METAL OXIDE	1	5%	1W	F
R067	1-247-849-00	CARBON	5.6K	5%	1/6W	
R068	1-247-831-00	CARBON	1K	5%	1/6W	
R069	1-244-865-00	CARBON	470	5%	1/2W	
R070	1-247-855-00	CARBON	10K	5%	1/6W	
R071	1-247-863-00	CARBON	22K	5%	1/6W	
R072	1-247-863-00	CARBON	22K	5%	1/6W	
R073	1-247-871-00	CARBON	47K	5%	1/6W	
R075	1-247-863-00	CARBON	22K	5%	1/6W	
R076	1-247-871-00	CARBON	47K	5%	1/6W	
R077	1-247-821-00	CARBON	390	5%	1/6W	
R078	1-247-855-00	CARBON	10K	5%	1/6W	
R079	1-247-855-00	CARBON	10K	5%	1/6W	
R080	1-247-855-00	CARBON	10K	5%	1/6W	
R081	1-247-903-00	CARBON	1M	5%	1/6W	
R082	1-247-831-00	CARBON	1K	5%	1/6W	
R083	1-247-903-00	CARBON	1M	5%	1/6W	
R084	1-247-879-00	CARBON	100K	5%	1/6W	
R085	1-247-879-00	CARBON	100K	5%	1/6W	
R086 ⚠	1-206-640-00	METAL OXIDE	100	5%	2W	F
R316	1-247-871-00	CARBON	47K	5%	1/6W	
R317	1-247-863-00	CARBON	22K	5%	1/6W	
R318	1-247-863-00	CARBON	22K	5%	1/6W	
R319	1-247-871-00	CARBON	47K	5%	1/6W	
R320	1-247-871-00	CARBON	47K	5%	1/6W	
R321	1-247-859-00	CARBON	15K	5%	1/6W	
R322	1-247-857-00	CARBON	12K	5%	1/6W	

Ref.No	Part No.	Description				Remark
R323	1-247-845-00	CARBON	3.9K	5%	1/6W	
R324	1-247-871-00	CARBON	47K	5%	1/6W	
R325	1-247-871-00	CARBON	47K	5%	1/6W	
R326	1-247-838-00	CARBON	2K	5%	1/6W	
R327	1-247-828-00	CARBON	750	5%	1/6W	
R328	1-247-847-00	CARBON	4.7K	5%	1/6W	
R329	1-247-855-00	CARBON	10K	5%	1/6W	
R330 ⚠	1-212-360-00	METAL OXIDE	1	5%	1W	F
R331 ⚠	1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R332	1-247-821-00	CARBON	390	5%	1/6W	
R333 ⚠	1-212-855-00	FUSIBLE	8.2	5%	1/4W	F
R334	1-247-887-00	CARBON	220K	5%	1/6W	
R335	1-247-887-00	CARBON	220K	5%	1/6W	
R336	1-247-865-00	CARBON	27K	5%	1/6W	
R337	1-247-865-00	CARBON	27K	5%	1/6W	
R338	1-247-848-00	CARBON	5.1K	5%	1/6W	
R339	1-247-867-00	CARBON	33K	5%	1/6W	
R340	1-247-867-00	CARBON	33K	5%	1/6W	
R341	1-247-855-00	CARBON	10K	5%	1/6W	
R342	1-247-856-00	CARBON	11K	5%	1/6W	
R343	1-247-872-00	CARBON	51K	5%	1/6W	
R344	1-247-847-00	CARBON	4.7K	5%	1/6W	
R345	1-247-873-00	CARBON	56K	5%	1/6W	
R346	1-247-900-00	CARBON	750K	5%	1/6W	
R347	1-247-837-00	CARBON	1.8K	5%	1/6W	
R348	1-247-855-00	CARBON	10K	5%	1/6W	
R349	1-247-871-00	CARBON	47K	5%	1/6W	
R350	1-247-825-00	CARBON	560	5%	1/6W	
R351	1-247-842-00	CARBON	3K	5%	1/6W	
R352	1-247-843-00	CARBON	3.3K	5%	1/6W	
R353 ⚠	1-212-850-00	FUSIBLE	5.1	5%	1/4W	F
R354 ⚠	1-206-482-00	METAL OXIDE	62	5%	2W	F
R355 ⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R356	1-247-859-00	CARBON	15K	5%	1/6W	
R357	1-247-823-00	CARBON	470	5%	1/6W	
R358	1-247-855-00	CARBON	10K	5%	1/6W	
R359	1-247-831-00	CARBON	1K	5%	1/6W	
R360	1-247-903-00	CARBON	1M	5%	1/6W	
R361	1-247-855-00	CARBON	10K	5%	1/6W	
R362	1-247-831-00	CARBON	1K	5%	1/6W	
R363	1-247-903-00	CARBON	1M	5%	1/6W	
R364	1-247-871-00	CARBON	47K	5%	1/6W	
R365	1-247-855-00	CARBON	10K	5%	1/6W	
R366	1-247-871-00	CARBON	47K	5%	1/6W	
R367	1-247-829-00	CARBON	820	5%	1/6W	
R368	1-247-880-00	CARBON	110K	5%	1/6W	
R369	1-247-839-00	CARBON	2.2K	5%	1/6W	
R370	1-247-839-00	CARBON	2.2K	5%	1/6W	
R371	1-247-847-00	CARBON	4.7K	5%	1/6W	
R372	1-247-855-00	CARBON	10K	5%	1/6W	
R373	1-247-891-00	CARBON	330K	5%	1/6W	
R374	1-247-891-00	CARBON	330K	5%	1/6W	
R375	1-247-863-00	CARBON	22K	5%	1/6W	

NOTE:

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When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R376	1-247-849-00	CARBON	5.6K	5%	1/6W	
R377	1-247-855-00	CARBON	10K	5%	1/6W	
R378	1-247-835-00	CARBON	1.5	5%	1/6W	
R379	1-247-855-00	CARBON	10KK	5%	1/6W	
R380	1-247-819-00	CARBON	330	5%	1/6W	
R381	1-247-871-00	CARBON	47K	5%	1/6W	
R382	1-247-879-00	CARBON	100K	5%	1/6W	
R383	1-247-849-00	CARBON	5.6K	5%	1/6W	
R384	1-247-857-00	CARBON	12K	5%	1/6W	
R385	1-247-855-00	CARBON	10K	5%	1/6W	
R386	1-247-839-00	CARBON	2.2K	5%	1/6W	
R387	1-247-871-00	CARBON	47K	5%	1/6W	
R388	1-247-871-00	CARBON	47K	5%	1/6W	
R389	1-247-847-00	CARBON	4.7K	5%	1/6W	
R390	1-247-859-00	CARBON	15K	5%	1/6W	
R391	1-247-855-00	CARBON	10K	5%	1/6W	
R392	1-247-871-00	CARBON	47K	5%	1/6W	
R393	1-247-867-00	CARBON	33K	5%	1/6W	
R394	1-247-879-00	CARBON	100K	5%	1/6W	
R395	1-247-879-00	CARBON	100K	5%	1/6W	
R396	1-247-887-00	CARBON	220K	5%	1/6W	
R397	1-247-867-00	CARBON	33K	5%	1/6W	
R398	1-247-883-00	CARBON	150K	5%	1/6W	
R399	1-247-883-00	CARBON	150K	5%	1/6W	
R400	1-247-857-00	CARBON	12K	5%	1/6W	
R401	1-247-879-00	CARBON	100K	5%	1/6W	
R402	1-247-879-00	CARBON	100K	5%	1/6W	
R403	1-247-883-00	CARBON	150K	5%	1/6W	
R404	1-247-855-00	CARBON	10K	5%	1/6W	
R405	1-247-867-00	CARBON	33K	5%	1/6W	
R406	1-247-883-00	CARBON	150K	5%	1/6W	
R407	1-247-871-00	CARBON	47K	5%	1/6W	
R408	1-247-867-00	CARBON	33K	5%	1/6W	
R409	1-247-897-00	CARBON	560K	5%	1/6W	
R410	1-247-847-00	CARBON	4.7K	5%	1/6W	
R411	1-247-871-00	CARBON	47K	5%	1/6W	
R412	1-247-897-00	CARBON	560K	5%	1/6W	
R413	1-247-867-00	CARBON	33K	5%	1/6W	
R414	1-247-868-00	CARBON	36K	5%	1/6W	
R415	1-247-832-00	CARBON	1.1K	5%	1/6W	
R416	1-247-857-00	CARBON	12K	5%	1/6W	
R417	1-247-866-00	CARBON	30K	5%	1/6W	
R418	1-247-871-00	CARBON	47K	5%	1/6W	
R419	1-247-855-00	CARBON	10K	5%	1/6W	
R420	1-247-871-00	CARBON	47K	5%	1/6W	
R421	1-247-871-00	CARBON	47K	5%	1/6W	
R422	1-247-823-00	CARBON	470	5%	1/6W	
R423	1-247-847-00	CARBON	4.7K	5%	1/6W	
R424 ⚠	1-212-360-00	METAL OXIDE	1	5%	1W	F
R426	1-247-871-00	CARBON	47K	5%	1/6W	
R427	1-247-855-00	CARBON	10K	5%	1/6W	
R428	1-247-879-00	CARBON	100K	5%	1/6W	
R429	1-247-871-00	CARBON	47K	5%	1/6W	
R430	1-247-859-00	CARBON	15K	5%	1/6W	
R431	1-247-871-00	CARBON	47K	5%	1/6W	
R432	1-247-859-00	CARBON	15K	5%	1/6W	
R433	1-247-871-00	CARBON	47K	5%	1/6W	
R434	1-247-855-00	CARBON	10K	5%	1/6W	
R435	1-247-871-00	CARBON	47K	5%	1/6W	
R436	1-247-831-00	CARBON	1K	5%	1/6W	
R437	1-247-831-00	CARBON	1K	5%	1/6W	
R438	1-247-831-00	CARBON	1K	5%	1/6W	
R441	1-247-859-00	CARBON	15K	5%	1/6W	
R442	1-247-855-00	CARBON	10K	5%	1/6W	
R443	1-247-825-00	CARBON	560	5%	1/6W	
R444	1-247-871-00	CARBON	47K	5%	1/6W	
R601	1-247-831-00	CARBON	1K	5%	1/6W	
R602	1-247-871-00	CARBON	47K	5%	1/6W	
R603	1-247-869-00	CARBON	39K	5%	1/6W	
R604	1-247-862-00	CARBON	20K	5%	1/6W	
R605	1-247-862-00	CARBON	20K	5%	1/6W	
R606	1-247-873-00	CARBON	56K	5%	1/6W	
R607	1-247-869-00	CARBON	39K	5%	1/6W	
R608	1-247-829-00	CARBON	820	5%	1/6W	
R609	1-247-829-00	CARBON	820	5%	1/6W	
R610	1-247-869-00	CARBON	39K	5%	1/6W	
R611	1-247-829-00	CARBON	820	5%	1/6W	
R612	1-247-829-00	CARBON	820	5%	1/6W	
R613	1-247-869-00	CARBON	39K	5%	1/6W	
R614	1-247-869-00	CARBON	39K	5%	1/6W	
R615	1-247-827-00	CARBON	680	5%	1/6W	
R616	1-247-853-00	CARBON	8.2K	5%	1/6W	
R617	1-247-855-00	CARBON	10K	5%	1/6W	
R618	1-247-853-00	CARBON	8.2K	5%	1/6W	
R619	1-247-853-00	CARBON	8.2K	5%	1/6W	
R620	1-247-853-00	CARBON	8.2K	5%	1/6W	
R621	1-247-853-00	CARBON	8.2K	5%	1/6W	
R622	1-247-849-00	CARBON	5.6K	5%	1/6W	
R623	1-247-855-00	CARBON	10K	5%	1/6W	
R624	1-247-842-00	CARBON	3K	5%	1/6W	
R625	1-247-807-00	CARBON	100	5%	1/6W	
R626	1-247-873-00	CARBON	56K	5%	1/6W	
R627	1-247-863-00	CARBON	22K	5%	1/6W	
R628	1-247-809-00	CARBON	120	5%	1/6W	
R629	1-247-830-00	CARBON	910	5%	1/6W	
R630	1-247-863-00	CARBON	22K	5%	1/6W	
R631	1-247-855-00	CARBON	10K	5%	1/6W	
R632	1-247-839-00	CARBON	2.2K	5%	1/6W	
R633	1-247-839-00	CARBON	2.2K	5%	1/6W	
R634	1-247-839-00	CARBON	2.2K	5%	1/6W	
R635	1-247-839-00	CARBON	2.2K	5%	1/6W	
R636	1-247-839-00	CARBON	2.2K	5%	1/6W	
R637	1-247-839-00	CARBON	2.2K	5%	1/6W	
R638	1-247-855-00	CARBON	10K	5%	1/6W	
R639	1-247-855-00	CARBON	10K	5%	1/6W	
R640	1-247-855-00	CARBON	10K	5%	1/6W	

NOTE:

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When indicating parts by reference number, please include the board name.

SS-28 FU-22 MT-4

Ref.No	Part No.	Description				Remark
R641	1-247-855-00	CARBON	10K	5%	1/6W	
R642	1-247-855-00	CARBON	10K	5%	1/6W	
R643	1-247-829-00	CARBON	820	5%	1/6W	
R644	1-247-829-00	CARBON	820	5%	1/6W	
R645	1-247-829-00	CARBON	820	5%	1/6W	
R646	1-247-829-00	CARBON	820	5%	1/6W	
R647	1-247-829-00	CARBON	820	5%	1/6W	
R648	1-247-829-00	CARBON	820	5%	1/6W	
R649	1-247-829-00	CARBON	820	5%	1/6W	
R650	1-247-853-00	CARBON	8.2K	5%	1/6W	
R651	1-247-871-00	CARBON	47K	5%	1/6W	
R652	1-247-847-00	CARBON	4.7K	5%	1/6W	
R653	1-247-831-00	CARBON	1K	5%	1/6W	
R654	1-247-831-00	CARBON	1K	5%	1/6W	
R655	1-247-831-00	CARBON	1K	5%	1/6W	
R656	1-247-871-00	CARBON	47K	5%	1/6W	
R657	1-247-869-00	CARBON	39K	5%	1/6W	
R658	1-247-839-00	CARBON	2.2K	5%	1/6W	
R901	1-247-871-00	CARBON	47K	5%	1/6W	
R902	1-247-863-00	CARBON	22K	5%	1/6W	
R903	1-247-841-00	CARBON	2.7K	5%	1/6W	

VARIABLE RESISTOR

Ref.No	Part No.	Description
RV001	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV301	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV302	1-228-750-00	RES, ADJ, CARBON 47K
RV303	1-228-750-00	RES, ADJ, CARBON 47K
RV304	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV305	1-228-750-00	RES, ADJ, CARBON 47K
RV306	1-228-994-00	RES, ADJ, METAL GLAZE 10K
RV307	1-228-994-00	RES, ADJ, METAL GLAZE 10K

THERMISTOR

Ref.No	Part No.	Description
TH001	1-800-202-XX	THERMISTOR S-10K
TH002	1-800-202-XX	THERMISTOR S-10K
TH301	1-800-198-XX	THERMISTOR S-1K
TH302	1-800-200-00	THERMISTOR S-3K

PIN LEAD

Ref.No	Part No.	Description
TP301	♠:3-846-049-11	PIN, LEAD
TP302	♠:3-846-049-11	PIN, LEAD
TP303	♠:3-846-049-11	PIN, LEAD
TP304	♠:3-846-049-11	PIN, LEAD
TP305	♠:3-846-049-11	PIN, LEAD
TP306	♠:3-846-049-11	PIN, LEAD
TP307	♠:3-846-049-11	PIN, LEAD
TP308	♠:3-846-049-11	PIN, LEAD
TP309	♠:3-846-049-11	PIN, LEAD
TP601	♠:3-846-049-11	PIN, LEAD
TP602	♠:3-846-049-11	PIN, LEAD

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Ref.No	Part No.	Description	Remark
	♠:1-612-323-11	FU-22 BOARD ************	
	♠:3-674-372-00	HOLDER (A), LED	
	♠:3-684-040-01	HOLDER (T), LED	
	♠:3-684-058-01	SPACER, LED	

CONNECTOR

Ref.No	Part No.	Description
CN301	♠:1-564-019-11	PIN, CONNECTOR 9P
CN302	♠:1-564-017-00	PIN, CONNECTOR 7P

DIODE

Ref.No	Part No.	Description
D301	8-719-812-31	DIODE TLR123
D302	8-719-812-30	DIODE TL0123
D303	8-719-812-32	DIODE TLY123
D304	8-719-812-32	DIODE TLY123
D305	8-719-812-33	DIODE TLG123A
D306	8-719-812-30	DIODE TL0123
D307	8-719-812-33	DIODE TLG123A
D308	8-719-906-49	DIODE LT-9230N
D309	8-719-812-33	DIODE TLG123A

RESISTOR

Ref.No	Part No.	Description			
R301	1-247-811-00	CARBON	150	5%	1/6W
R302	1-247-817-00	CARBON	270	5%	1/6W
R303	1-247-811-00	CARBON	150	5%	1/6W
R304	1-247-807-00	CARBON	100	5%	1/6W
R305	1-247-811-00	CARBON	150	5%	1/6W
R306	1-247-811-00	CARBON	150	5%	1/6W
R307	1-247-811-00	CARBON	150	5%	1/6W
R308	1-247-811-00	CARBON	150	5%	1/6W
R309	1-247-815-00	CARBON	220	5%	1/6W

VARIABLE RESISTOR

Ref.No	Part No.	Description
RV301	1-228-988-00	RES, VAR, CARBON 10K/10K

SWITCH

Ref.No	Part No.	Description
S301	1-553-997-00	SWITCH, KEY BOARD
S302	1-553-997-00	SWITCH, KEY BOARD
S303	1-553-997-00	SWITCH, KEY BOARD
S304	1-553-997-00	SWITCH, KEY BOARD
S305	1-553-997-00	SWITCH, KEY BOARD
S306	1-553-997-00	SWITCH, KEY BOARD
S307	1-553-997-00	SWITCH, KEY BOARD
S308	1-553-997-00	SWITCH, KEY BOARD

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Ref.No	Part No.	Description
	♠:1-610-400-00	MT-4 BOARD **********
	⚠1-463-350-12	TUNER (BT-881)

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NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
	♠:A-6721-201-A	TU-60 BOARD, COMPLETE **********************			
	♠:3-662-227-00	HOLDER (R-3), LED			
	♠:3-674-390-00	HOLDER (B), LED			
	♠:3-681-220-00	BAND, RETAINER, TUNER			
	♠:3-681-233-00	CASE, SHIELD (MAIN), TU			
	♠:3-684-073-01	LID, UPPER, TU SHIELD CASE (S)			
	♠:3-684-074-01	LID, BOTTOM,			
C001	1-102-529-00	CERAMIC	100PF	5%	50V
C002	1-102-527-00	CERAMIC	82PF	5%	50V
C003	1-102-949-00	CERAMIC	12PF	5%	50V
C004	1-102-523-00	CERAMIC	56PF	5%	50V
C005	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C006	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C007	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C008	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C009	1-123-380-00	ELECT	1MF	20%	50V
C010	1-123-356-00	ELECT	10MF	20%	16V
C011	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C012	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C013	1-161-036-00	CERAMIC	0.047MF	20%	25V
C014	1-102-529-00	CERAMIC	100PF	5%	50V
C015	1-123-332-00	ELECT	47MF	20%	16V
C016	1-101-004-00	CERAMIC	0.01MF		50V
C017	1-102-979-00	CERAMIC	24PF	5%	50V
C018	1-161-034-00	CERAMIC	0.022MF	20%	25V
C019	1-123-352-00	ELECT	1MF	20%	50V
C020	1-161-030-00	CERAMIC	0.0047MF	20%	25V
C021	1-123-286-00	ELECT	0.33MF	20%	50V
C022	1-161-032-00	CERAMIC	0.01MF	20%	25V
C023	1-101-361-00	CERAMIC	150PF	10%	50V
C024	1-123-380-00	ELECT	1MF	20%	50V
C025	1-104-077-00	POLYSTYRENE	0.001MF	5%	50V
C026	1-161-034-00	CERAMIC	0.022MF	20%	25V
C027	1-161-034-00	CERAMIC	0.022MF	20%	25V
C028	1-161-034-00	CERAMIC	0.022MF	20%	25V
C029	1-130-478-00	MYLAR	0.0039MF	5%	50V
C030	1-130-478-00	MYLAR	0.0039MF	5%	50V
C031	1-130-478-00	MYLAR	0.0039MF	5%	50V
C032	1-123-380-00	ELECT	1MF	20%	50V
C033	1-123-330-00	ELECT	22MF	20%	16V
C034	1-123-380-00	ELECT	1MF	20%	50V
C035	1-123-332-00	ELECT	47MF	20%	16V
C036	1-123-332-00	ELECT	47MF	20%	16V
C037	1-123-330-00	ELECT	22MF	20%	16V
C038	1-123-356-00	ELECT	10MF	20%	16V
C039	1-161-036-00	CERAMIC	0.047MF	20%	25V
C040	1-104-089-00	POLYSTYRENE	0.0033MF	5%	50V
C041	1-104-077-00	POLYSTYRENE	0.001MF	5%	50V
C042	1-161-036-00	CERAMIC	0.047MF	20%	25V
C043	1-161-034-00	CERAMIC	0.022MF	20%	25V
C044	1-136-244-11	FILM	0.1MF	2%	50V

Ref.No	Part No.	Description			Remark
C045	1-136-244-11	FILM	0.1MF	2%	50V
C046	1-123-308-00	ELECT	220MF	20%	10V
C047	1-136-243-11	FILM	0.047MF	2%	50V
C048	1-136-243-11	FILM	0.047MF	2%	50V
C101	1-102-963-00	CERAMIC	33PF	10%	50V
C102	1-102-963-00	CERAMIC	33PF	10%	50V
C103	1-123-381-00	ELECT	2.2MF	20%	50V
C104	1-161-036-00	CERAMIC	0.047MF	20%	25V
C105	1-161-271-00	CERAMIC	100PF	5%	50V
C106	1-130-495-00	MYLAR	0.1MF	5%	50V
C107	1-130-493-00	MYLAR	0.068MF	5%	50V
C108	1-130-493-00	MYLAR	0.068MF	5%	50V
C109	1-102-963-00	CERAMIC	33PF	10%	50V
C110	1-123-356-00	ELECT	10MF	20%	16V
C111	1-101-004-00	CERAMIC	0.01MF		50V
C112	1-123-356-00	ELECT	10MF	20%	16V
C201	1-101-004-00	CERAMIC	0.01MF		50V
C202	1-123-332-00	ELECT	47MF	20%	16V
C203	1-123-332-00	ELECT	47MF	20%	16V
C204	1-101-004-00	CERAMIC	0.01MF		50V
C205	1-123-356-00	ELECT	10MF	20%	16V
C206	1-123-380-00	ELECT	1MF	20%	50V
C207	1-123-356-00	ELECT	10MF	20%	16V
C208	1-101-004-00	CERAMIC	0.01MF		50V
C209	1-101-004-00	CERAMIC	0.01MF		50V
C221	1-123-330-00	ELECT	22MF	20%	16V
C301	1-123-328-00	ELECT	4.7MF	20%	25V
C302	1-123-328-00	ELECT	4.7MF	20%	25V
C303	1-123-333-00	ELECT	100MF	20%	16V
C403	1-123-332-00	ELECT	47MF	20%	16V
C404	1-123-328-00	ELECT	4.7MF	20%	25V

FILTER

CF001	1-527-840-00	FILTER, CERAMIC
CF002	1-527-839-00	FILTER, CERAMIC
CF101	1-527-822-00	OSCILLATOR, CERAMIC

CONNECTOR

CN001	♠:1-560-893-00	PIN, CONNECTOR 5P
CN002	♠:1-560-892-00	PIN, CONNECTOR 4P
CN003	♠:1-560-892-00	PIN, CONNECTOR 4P
CN101	♠:1-560-900-00	PIN, CONNECTOR 12P
CN102	♠:1-560-892-00	PIN, CONNECTOR 4P
CN201	♠:1-560-892-00	PIN, CONNECTOR 4P

TRIMMER

CT001	1-404-134-00	TRAP, CERAMIC (5.5MHZ)

DIODE

D001	8-719-911-19	DIODE 1SS119
D102	8-719-911-19	DIODE 1SS119
D103	8-719-812-31	DIODE TLR123

When indicating parts by reference number, please include the board name.

TU-60

Ref.No	Part No.	Description				Remark
D104	8-719-812-31	DIODE TLR123				
D105	8-719-812-31	DIODE TLR123				
D106	8-719-812-32	DIODE TLY123				
D107	8-719-812-33	DIODE TLG123A				
D201	8-719-000-12	DIODE MC931				
D402	8-719-911-19	DIODE 1SS119				
		IC				
IC001	8-759-909-08	IC TDA3541				
IC002	8-759-909-54	IC TDA2546A				
IC003	6-066-721-60	IC TDA3800AS				
IC004	8-759-145-58	IC UPC4558C				
IC101	8-759-600-98	IC M50160-018SP				
IC102	8-759-600-66	IC M58653P				
IC103	8-759-600-15	IC M54570L				
IC201	8-759-157-40	IC UPC574J				
		COIL				
L001	1-408-592-00	MICRO INDUCTOR 1.2UH				
L002	1-408-591-00	MICRO INDUCTOR 1UH				
L003	1-408-591-00	MICRO INDUCTOR 1UH				
L004	1-408-600-00	MICRO INDUCTOR 5.6UH				
L005	1-408-599-00	MICRO INDUCTOR 4.7UH				
L006	1-408-597-00	MICRO INDUCTOR 3.3UH				
L007	1-408-591-00	MICRO INDUCTOR 1UH				
L008	1-408-591-00	MICRO INDUCTOR 1UH				
		TRANSISTOR				
Q001	=>8-729-203-28	TRANSISTOR 2SC2216				
Q002	=>8-729-245-83	TRANSISTOR 2SC2458				
Q003	8-729-900-74	TRANSISTOR DTC143TS				
Q004	8-729-900-74	TRANSISTOR DTC143TS				
Q101	=>8-729-245-83	TRANSISTOR 2SC2458				
Q102	=>8-729-245-83	TRANSISTOR 2SC2458				
Q103	8-729-900-89	TRANSISTOR DTC144ES				
Q201	8-729-900-89	TRANSISTOR DTC144ES				
Q202	8-729-103-43	TRANSISTOR 2SB734				
Q203	8-729-900-89	TRANSISTOR DTC144ES				
Q301	=>8-729-204-83	TRANSISTOR 2SA1048-GR				
Q302	=>8-729-204-83	TRANSISTOR 2SA1048-GR				
Q303	=>8-729-204-83	TRANSISTOR 2SA1048-GR				
Q401	=>8-729-204-83	TRANSISTOR 2SA1048-GR				
Q402	=>8-729-204-83	TRANSISTOR 2SA1048-GR				
Q403	8-729-900-61	TRANSISTOR DTA114ES				
		RESISTOR				
R001	1-247-819-00	CARBON	330	5%	1/6W	
R002	1-247-847-00	CARBON	4.7K	5%	1/6W	
R003	1-247-839-00	CARBON	2.2K	5%	1/6W	
R004	1-247-815-00	CARBON	220	5%	1/6W	
R005	1-247-813-00	CARBON	180	5%	1/6W	
R006	1-247-869-00	CARBON	39K	5%	1/6W	
R009	1-247-843-00	CARBON	3.3K	5%	1/6W	
R010	1-247-853-00	CARBON	8.2K	5%	1/6W	
R011	1-247-879-00	CARBON	100K	5%	1/6W	
R012	1-247-871-00	CARBON	47K	5%	1/6W	
R013	1-247-871-00	CARBON	47K	5%	1/6W	
R014	1-247-831-00	CARBON	1K	5%	1/6W	
R015	1-247-813-00	CARBON	180	5%	1/6W	
R016	1-247-824-00	CARBON	510	5%	1/6W	
R017	1-247-821-00	CARBON	390	5%	1/6W	
R018	1-247-823-00	CARBON	470	5%	1/6W	
R019	1-247-835-00	CARBON	1.5K	5%	1/6W	
R020	1-247-829-00	CARBON	820	5%	1/6W	
R021	1-247-829-00	CARBON	820	5%	1/6W	
R022	1-247-829-00	CARBON	820	5%	1/6W	
R023	1-247-847-00	CARBON	4.7K	5%	1/6W	
R024	1-247-853-00	CARBON	8.2K	5%	1/6W	
R025	1-247-841-00	CARBON	2.7K	5%	1/6W	
R026	1-247-841-00	CARBON	2.7K	5%	1/6W	
R027	1-247-853-00	CARBON	8.2K	5%	1/6W	
R028	1-247-831-00	CARBON	1K	5%	1/6W	
R029	1-247-863-00	CARBON	22K	5%	1/6W	
R030	1-247-839-00	CARBON	2.2K	5%	1/6W	
R031	1-247-865-00	CARBON	27K	5%	1/6W	
R032	1-247-829-00	CARBON	820	5%	1/6W	
R033	1-215-465-00	METAL	68K	1%	1/6W	
R034	1-215-409-00	METAL	330	1%	1/6W	
R035	1-215-487-00	METAL	560K	1%	1/6W	
R037	1-215-462-00	METAL	51K	1%	1/6W	
R038	1-215-408-00	METAL	300	1%	1/6W	
R039	1-215-486-00	METAL	510K	1%	1/6W	
R041	1-246-489-00	CARBON	4.7K	5%	1/4W	
R101	1-246-505-00	CARBON	22K	5%	1/4W	
R102	1-246-505-00	CARBON	22K	5%	1/4W	
R103	1-246-505-00	CARBON	22K	5%	1/4W	
R104	1-246-497-00	CARBON	10K	5%	1/4W	
R105	1-246-497-00	CARBON	10K	5%	1/4W	
R106	1-246-497-00	CARBON	10K	5%	1/4W	
R107	1-246-497-00	CARBON	10K	5%	1/4W	
R108	1-246-497-00	CARBON	10K	5%	1/4W	
R109	1-246-497-00	CARBON	10K	5%	1/4W	
R111	1-246-472-00	CARBON	910	5%	1/4W	
R112	1-246-472-00	CARBON	910	5%	1/4W	
R113	1-246-505-00	CARBON	22K	5%	1/4W	
R114	1-246-505-00	CARBON	22K	5%	1/4W	
R115	1-246-505-00	CARBON	22K	5%	1/4W	
R116	1-246-505-00	CARBON	22K	5%	1/4W	
R117	1-246-505-00	CARBON	22K	5%	1/4W	
R118	1-247-891-00	CARBON	330K	5%	1/6W	
R119	1-247-839-00	CARBON	2.2K	5%	1/6W	
R120	1-246-505-00	CARBON	22K	5%	1/4W	
R121	1-247-839-00	CARBON	2.2K	5%	1/6W	
R122	1-246-477-00	CARBON	1.5K	5%	1/4W	
R123	1-246-475-00	CARBON	1.2K	5%	1/4W	

When indicating parts by reference number, please include the board name.

TU-60 TR-14 CS-3 CS-4 RD-6 RD-7 HP-7

Ref.No	Part No.	Description				Remark
R124	1-246-521-00	CARBON	100K	5%	1/4W	
R125	1-246-505-00	CARBON	22K	5%	1/4W	
R128	1-247-853-00	CARBON	8.2K	5%	1/6W	
R201	1-246-509-00	CARBON	33K	5%	1/4W	
R202	1-247-863-00	CARBON	22K	5%	1/6W	
R203	1-247-847-00	CARBON	4.7K	5%	1/6W	
R204	1-247-831-00	CARBON	1K	5%	1/6W	
R206	1-247-843-00	CARBON	3.3K	5%	1/6W	
R207	1-247-851-00	CARBON	6.8K	5%	1/6W	
R208 ⚠	1-206-670-00	METAL OXIDE	1.8K	5%	2W	F
R209	1-246-509-00	CARBON	33K	5%	1/4W	
R210	1-246-505-00	CARBON	22K	5%	1/4W	
R221	1-247-839-00	CARBON	2.2K	5%	1/6W	
R222	1-247-863-00	CARBON	22K	5%	1/6W	
R223	1-247-871-00	CARBON	47K	5%	1/6W	
R224	1-246-533-00	CARBON	330K	5%	1/4W	
R301	1-247-843-00	CARBON	3.3K	5%	1/6W	
R302	1-247-843-00	CARBON	3.3K	5%	1/6W	
R303	1-247-809-00	CARBON	120	5%	1/6W	
R304	1-247-863-00	CARBON	22K	5%	1/6W	
R305	1-247-853-00	CARBON	8.2K	5%	1/6W	
R306	1-247-801-00	CARBON	56	5%	1/6W	
R308	1-246-457-00	CARBON	220	5%	1/4W	
R401	1-246-505-00	CARBON	22K	5%	1/4W	
R402	1-247-879-00	CARBON	100K	5%	1/6W	
R403	1-246-505-00	CARBON	22K	5%	1/4W	
R404	1-247-871-00	CARBON	47K	5%	1/6W	
R405	1-246-509-00	CARBON	33K	5%	1/4W	

VARIABLE RESISTOR

RV001	1-228-750-00	RES, ADJ, CARBON 47K
RV002	1-228-995-00	RES, ADJ, METAL GLAZE 22K

SWITCH

S101	1-553-997-00	SWITCH, KEY BOARD
S102	1-553-997-00	SWITCH, KEY BOARD
S103	1-553-997-00	SWITCH, KEY BOARD
S104	1-553-997-00	SWITCH, KEY BOARD
S105	1-553-997-00	SWITCH, KEY BOARD
S106	1-553-997-00	SWITCH, KEY BOARD
S107	1-553-997-00	SWITCH, KEY BOARD
S201	1-516-226-00	SLIDE SWITCH

FILTER

SWF001	1-404-438-00	FILTER, SAW

TRANSFORMER

Ref.No	Part No.	Description
T002	1-404-068-00	COIL, VIF
T003	1-404-068-00	COIL, VIF
T004	1-404-378-00	I.F.T
T005	1-404-378-00	I.F.T
T006	1-404-135-00	COIL, SIF DISCRI
T007	1-404-378-00	I.F.T
T008	1-404-135-00	COIL, SIF DISCRI
T009	1-404-343-00	COIL, IF

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♣:1-612-327-11 TR-14 BOARD
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VARIABLE RESISTOR

RV701	1-228-603-00	RES, VAR, CARBON 100K

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♣:1-609-227-11 CS-3 BOARD
****

CONNECTOR

CN301	♣:1-564-029-00	PIN, CONNECTOR 4P

SWITCH

S301	1-554-241-00	SWITCH, LEVER

****

♣:1-609-228-11 CS-4 BOARD
****

SWITCH

S302	1-554-241-00	SWITCH, LEVER

****

♣:1-610-401-00 RD-6 BOARD
****

♣:3-681-157-00 HOLDER, RD

DIODE

D001	8-719-921-03	DIODE GP-2S02A

****

♣:1-610-402-00 RD-7 BOARD
****

DIODE

D001	8-719-921-03	DIODE GP-2S02A

****

♣:1-612-324-11 HP-7 BOARD
****

JACK

JK401	1-507-833-00	JACK

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

RL-18 TM-54

Ref.No	Part No.	Description				Remark
	♠:1-612-330-11	RL-18 BOARD ************				
		CAPACITOR				
C801	1-123-356-00	ELECT	10MF	20%	16V	
C802	1-123-356-00	ELECT	10MF	20%	16V	
C803	1-161-039-00	CERAMIC	0.001MF	10%	25V	
C804	1-161-039-00	CERAMIC	0.001MF	10%	25V	
C805	1-123-356-00	ELECT	10MF	20%	16V	
		CONNECTOR				
CN801	♠:1-564-017-00	PIN, CONNECTOR 7P				
CN802	♠:1-564-022-00	PIN, CONNECTOR 12P				
CN803	♠:1-564-017-00	PIN, CONNECTOR 7P				
		DIODE				
D801	8-719-911-19	DIODE 1SS119				
D802	8-719-911-19	DIODE 1SS119				
		IC				
IC801	8-759-135-80	IC UPC358C				
		RESISTOR				
R801	1-247-855-00	CARBON	10K	5%	1/6W	
R802	1-247-855-00	CARBON	10K	5%	1/6W	
R803	1-247-852-00	CARBON	7.5K	5%	1/6W	
R804	1-247-852-00	CARBON	7.5K	5%	1/6W	
R805	1-247-878-00	CARBON	91K	5%	1/6W	
R806	1-247-878-00	CARBON	91K	5%	1/6W	
R807	1-247-861-00	CARBON	18K	5%	1/6W	
R808	1-247-861-00	CARBON	18K	5%	1/6W	
R809	1-244-853-00	CARBON	150	5%	1/2W	

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Ref.No	Part No.	Description				Remark
	♠:A-6728-995-A	TM-54 BOARD, COMPLETE **********************				
		CAPACITOR				
C101	1-123-354-00	ELECT	3.3MF	20%	50V	
C102	1-161-772-11	CERAMIC	0.1MF	10%	25V	
C103	1-161-061-00	CERAMIC	0.068MF	10%	50V	
C104	1-161-772-11	CERAMIC	0.1MF	10%	25V	
C105	1-125-299-00	************	47000MF		5V	
C106	1-123-357-00	ELECT	22MF	20%	50V	
C107	1-102-959-00	CERAMIC	22PF	5%	50V	
C108	1-123-669-51	ELECT	33MF	20%	16V	
C109	1-161-024-00	CERAMIC	0.082MF	10%	25V	
		CONNECTOR				
CN102	♠:1-564-002-00	PIN, CONNECTOR 3P				
CN104	♠:1-564-006-11	PIN, CONNECTOR 7P				
CN106	♠:1-564-027-00	PIN, CONNECTOR 2P				
		TRIMMER				
CT101	1-141-022-11	CAP, TRIMMER, CERAMIC	20PF			
		DIODE				
D101	8-719-812-31	DIODE TLR123				
D102	8-719-911-19	DIODE 1SS119				
D103	8-719-911-19	DIODE 1SS119				
D104	8-719-191-07	DIODE RD9.1E-B				
D105	8-719-911-19	DIODE 1SS119				
D106	8-719-911-19	DIODE 1SS119				
D107	8-719-911-19	DIODE 1SS119				
		IC				
IC101	8-759-101-97	IC UPD7519G-053				
		TRANSISTOR				
Q101	=>8-729-245-83	TRANSISTOR 2SC2458				
Q102	=>8-729-245-83	TRANSISTOR 2SC2458				
Q103	=>8-729-204-83	TRANSISTOR 2SA1048-GR				
Q104	=>8-729-245-83	TRANSISTOR 2SC2458				
		RESISTOR				
R101	1-247-875-00	CARBON	68K	5%	1/6W	
R102	1-247-879-00	CARBON	100K	5%	1/6W	
R103	1-247-855-00	CARBON	10K	5%	1/6W	
R104	1-247-855-00	CARBON	10K	5%	1/6W	
R105	1-247-855-00	CARBON	10K	5%	1/6W	
R106	1-247-855-00	CARBON	10K	5%	1/6W	
R107	1-247-855-00	CARBON	10K	5%	1/6W	
R108	1-247-855-00	CARBON	10K	5%	1/6W	
R109	1-247-855-00	CARBON	10K	5%	1/6W	
R110	1-247-855-00	CARBON	10K	5%	1/6W	
R111	1-247-855-00	CARBON	10K	5%	1/6W	
R112	1-247-867-00	CARBON	33K	5%	1/6W	
R113	1-247-872-00	CARBON	51K	5%	1/6W	
R114	1-247-886-00	CARBON	200K	5%	1/6W	
R115	1-247-903-00	CARBON	1M	5%	1/6W	
R116	1-247-868-00	CARBON	36K	5%	1/6W	
R117	1-247-874-00	CARBON	62K	5%	1/6W	
R118	1-247-869-00	CARBON	39K	5%	1/6W	
R119	1-247-879-00	CARBON	100K	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R121	1-247-867-00	CARBON	33K	5%	1/6W	
R122	1-247-863-00	CARBON	22K	5%	1/6W	
R123	1-247-831-00	CARBON	1K	5%	1/6W	
R124	1-247-843-00	CARBON	3.3K	5%	1/6W	
R125	1-247-879-00	CARBON	100K	5%	1/6W	
R126	1-247-879-00	CARBON	100K	5%	1/6W	
R127	1-247-879-00	CARBON	100K	5%	1/6W	
R128	1-247-879-00	CARBON	100K	5%	1/6W	
R129	1-247-804-00	CARBON	75	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
		CRYSTAL	
X101	1-527-647-00	OSCILLATOR, CRYSTAL	

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Ref.No	Part No.	Description	Remark
	♠:A-6728-996-A	TM-55 BOARD, COMPLETE	
	♠:3-684-005-01	HOLDER (S), LED	
	♠:3-684-030-01	HOLDER, INDICATION TUBE	
	7-685-134-21	SCREW +P 2.6X8 TYPE2 SLIT	
		DIODE	
D201	8-719-812-31	DIODE TLR123	
D202	8-719-812-31	DIODE TLR123	
D203	8-719-812-31	DIODE TLR123	
D204	8-719-812-31	DIODE TLR123	
		FILTER	
FL201	1-519-315-11	INDICATOR TUBE, FLUORESCENT	
		RESISTOR	
R201	1-247-815-00	CARBON 220 5% 1/6W	
R202	1-247-815-00	CARBON 220 5% 1/6W	
		SWITCH	
S201	1-553-997-00	SWITCH, KEY BOARD	
S202	1-553-997-00	SWITCH, KEY BOARD	
S203	1-553-997-00	SWITCH, KEY BOARD	
S204	1-553-997-00	SWITCH, KEY BOARD	
S205	1-553-997-00	SWITCH, KEY BOARD	
S206	1-553-997-00	SWITCH, KEY BOARD	
S207	1-553-997-00	SWITCH, KEY BOARD	
S208	1-553-997-00	SWITCH, KEY BOARD	
S209	1-553-997-00	SWITCH, KEY BOARD	
S210	1-553-997-00	SWITCH, KEY BOARD	
S211	1-553-997-00	SWITCH, KEY BOARD	
S212	1-553-997-00	SWITCH, KEY BOARD	
S213	1-553-997-00	SWITCH, KEY BOARD	
S214	1-553-997-00	SWITCH, KEY BOARD	
S215	1-554-375-00	SWITCH, PUSH	

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Ref.No	Part No.	Description	Remark
	♠:1-612-325-11	SV-12 BOARD	
		SLIDE RES VAR	
RV501	1-230-414-11	RES, VAR, SLIDE 20K/20K	

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NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
	♠:1-612-326-11	SW-31 BOARD	
		DIODE	
D601	8-719-911-19	DIODE 1SS119	
		SWITCH	
S601	1-553-754-00	SWITCH, SLIDE	
S602	1-553-716-00	SWITCH, SLIDE	
S603	1-553-716-00	SWITCH, SLIDE	
S604	1-553-716-00	SWITCH, SLIDE	
S605	1-553-716-00	SWITCH, SLIDE	
S606	1-553-716-00	SWITCH, SLIDE	
		RESISTOR	
R601	1-247-807-00	CARBON 100 5% 1/6W	

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Ref.No	Part No.	Description	Remark
	♠:1-606-794-00	N BOARD	
		CAPACITOR	
C001	1-123-617-00	ELECT 10MF 20% 16V	
C002	1-123-617-00	ELECT 10MF 20% 16V	
C003	1-123-617-00	ELECT 10MF 20% 16V	
C004	1-161-019-00	CERAMIC 0.033MF 10% 25V	
C005	1-106-184-00	MYLAR 0.0033MF 5% 50V	
C006	1-123-821-00	ELECT 47MF 20% 16V	
		DIODE	
D001	8-719-110-32	DIODE PH302B	
		IC	
IC001	8-759-113-73	IC UPC1373H	
		COIL	
L001	1-404-310-00	COIL	

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Ref.No	Part No.	Description	Remark
	♠:1-605-071-00	LM-8 BOARD	
		CAPACITOR	
C101	1-161-057-00	CERAMIC 0.033MF 10% 50V	
C102	1-161-057-00	CERAMIC 0.033MF 10% 50V	
		COIL	
L101	1-408-120-00	MICRO INDUCTOR 18UH	
L102	1-408-120-00	MICRO INDUCTOR 18UH	
		RESISTOR	
R101	⚠1-206-640-00	METAL OXIDE 100 5% 2W	F

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POWER BLOCK

Ref.No.	Part No.	Description		Remark
	⚠.1-413-171-11	POWER BLOCK (SR-19E)		

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M BOARD

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CAPACITOR

Ref.No.	Part No.	Description		Remark
C601	⚠.1-110-085-00	MYLAR	0.22MF	250V
C602	⚠.1-161-742-00	CERAMIC	2200PF	400V
C603	⚠.1-161-742-00	CERAMIC	2200PF	400V
C604	⚠.1-161-742-00	CERAMIC	2200PF	400V
C605	⚠.1-161-742-00	CERAMIC	2200PF	400V
C606	⚠.1-110-085-00	MYLAR	0.22MF	250V
C607	1-161-743-00	CERAMIC	4700PF	400V
C608	1-161-743-00	CERAMIC	4700PF	400V
C609	1-125-311-00	ELECT	220MF	400V
C610	1-124-023-00	ELECT	4.7MF	350V
C611	1-124-023-00	ELECT	4.7MF	350V
C612	1-124-162-00	ELECT	47MF	10V
C613	1-124-162-00	ELECT	47MF	10V
C621	1-108-413-00	MYLAR	2200PF	200V
C622	1-108-413-00	MYLAR	2200PF	200V
C623	1-161-910-00	CERAMIC	390PF	500V
C624	1-161-910-00	CERAMIC	390PF	500V
C625	1-161-915-00	CERAMIC	1000PF	500V
C626	1-130-516-00	MYLAR	0.01MF	50V
C627	1-130-520-00	MYLAR	0.022MF	50V
C628	1-124-344-00	ELECT	22MF	100V
C629	1-108-377-00	MYLAR	0.01MF	100V
C630	1-123-974-00	ELECT	2200MF	16V
C631	1-124-127-00	ELECT	100MF	25V
C632	1-130-027-00	FILM	5600PF	50V
C633	1-130-508-00	MYLAR	2200PF	50V
C634	1-130-522-00	MYLAR	0.033MF	50V
C635	1-123-318-00	ELECT	33MF	16V
C636	1-123-330-00	ELECT	22MF	25V
C637	1-123-323-00	ELECT	470MF	16V
C638	1-123-324-00	ELECT	1000MF	16V
C639	1-123-323-00	ELECT	470MF	16V
C640	1-123-332-00	ELECT	47MF	25V
C641	1-123-333-00	ELECT	100MF	25V
C642	1-123-333-00	ELECT	100MF	25V
C643	1-123-357-00	ELECT	22MF	50V
C644	1-123-357-00	ELECT	22MF	50V

DIODE

Ref.No.	Part No.	Description	Remark
D601	⚠.8-719-300-63	DIODE LB156	
D621	8-719-908-00	DIODE ESAC33-02CS	
D622	=>8-719-900-95	DIODE V09G	
D623	=>8-719-815-85	DIODE 1S1585	
D624	8-719-100-61	DIODE RD11E-B2	
D625	=>8-719-911-19	DIODE 1SS119	
D626	=>8-719-100-23	DIODE RD4.3E-B2	
D627	=>8-719-100-23	DIODE RD4.3E-B2	
D628	=>8-719-200-02	DIODE 10-E2	
D629	8-719-100-67	DIODE RD13E-BI	
⚠D630	=>8-719-101-04	DIODE RD33E-B2	
D631	=>8-719-911-19	DIODE 1SS119	
D632	=>8-719-911-19	DIODE 1SS119	
D633	=>8-719-911-19	DIODE 1SS119	
D634	=>8-719-911-19	DIODE 1SS119	
D635	=>8-719-911-19	DIODE 1SS119	
D636	=>8-719-911-19	DIODE 1SS119	
D637	=>8-719-911-19	DIODE 1SS119	
D638	8-719-100-37	DIODE RD6.2E-BI	
D639	=>8-719-911-19	DIODE 1SS119	
D640	8-719-100-38	DIODE RD6.2E-B2	
⚠D641	=>8-719-900-95	DIODE V09G	
⚠D642	=>8-719-911-19	DIODE 1SS119	

FUSE

Ref.No.	Part No.	Description	Remark
F601	⚠.1-532-237-11	FUSE, Time-Lag	3.15AT 250V

FERRITE CORE

Ref.No.	Part No.	Description	Remark
FB621	1-543-060-11	FERRITE CORE	
FB622	1-543-060-11	FERRITE CORE	
FB623	1-543-060-11	FERRITE CORE	
FB624	1-543-060-11	FERRITE CORE	

IC

Ref.No.	Part No.	Description	Remark
IC621	8-759-937-59	IC MB3759	

COIL

Ref.No.	Part No.	Description	Remark
L601	⚠.1-421-481-21	LFT	
L621	1-410-054-11	CHOKE, COIL	
L622	1-421-421-21	CHOKE, COIL	
L623	1-459-215-31	CHOKE, COIL	
L624	1-408-933-11	CHOKE, COIL	

TRANSISTOR

Ref.No.	Part No.	Description	Remark
⚠Q601	=>8-729-133-55	TRANSISTOR 2SC2335-L2	
⚠Q602	=>8-729-133-55	TRANSISTOR 2SC2335-L2	
Q603	8-729-102-03	TRANSISTOR 2SD1020-H	
Q604	8-729-102-03	TRANSISTOR 2SD1020-H	
Q621	8-729-306-72	TRANSISTOR 2SD667A-C	
Q622	=>8-729-245-83	TRANSISTOR 2SC2458-GR	
Q623	=>8-729-245-83	TRANSISTOR 2SC2458-GR	
Q624	=>8-729-204-82	TRANSISTOR 2SA1048-GR	
Q625	8-729-177-32	TRANSISTOR 2SD773-3	
Q626	8-729-188-23	TRANSISTOR 2SD882-P	
Q627	8-729-188-23	TRANSISTOR 2SD882-P	
Q628	=>8-729-245-83	TRANSISTOR 2SC2458-GR	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

POWER BLOCK

RESISTOR

Ref.No.	Part No.	Description			Remark
R601	⚠.1-214-947-00	METAL-FILM	2.7M	1/2W	F
R602	⚠.1-217-292-00	WIRE-WOUND	3.3	5W	F
R603	1-246-528-00	CARBON	200K	1/4W	
R604	1-246-528-00	CARBON	200K	1/4W	
R605	1-246-528-00	CARBON	200K	1/4W	
R606	1-246-528-00	CARBON	200K	1/4W	
R607	⚠.1-212-946-00	FUSE	3.3	1/2W	F
R608	⚠.1-212-946-00	FUSE	3.3	1/2W	F
R609	1-246-449-00	CARBON	100	1/4W	
R610	1-246-449-00	CARBON	100	1/4W	
R621	⚠.1-206-475-00	METAL-OXIDE	33	2W	F
R622	1-535-363-00	SHUNT	0.02	2W	
R623	1-246-485-00	CARBON	3.3K	1/4W	
R624	1-246-473-00	CARBON	1.0K	1/4W	
R626	⚠.1-213-151-00	METAL-OXIDE	4.7K	1W	F
R627	1-246-503-00	CARBON	18K	1/4W	
R628	1-246-509-00	CARBON	33K	1/4W	
R629	1-246-417-00	CARBON	4.7	1/4W	
R630	1-246-453-00	CARBON	150	1/4W	
R631	1-246-485-00	CARBON	3.3K	1/4W	
R632	1-246-473-00	CARBON	1.0K	1/4W	
R633	1-246-481-00	CARBON	2.2K	1/4W	
R634	1-246-491-00	CARBON	5.6K	1/4W	
R635	1-246-483-00	CARBON	2.7K	1/4W	
R636	1-246-478-00	CARBON	1.6K	1/4W	
R637	1-246-503-00	CARBON	18K	1/4W	
R638	1-246-509-00	CARBON	33K	1/4W	
R639	1-246-467-00	CARBON	560	1/4W	
R640	1-246-501-00	CARBON	15K	1/4W	
R641	1-246-489-00	CARBON	4.7K	1/4W	
R642	1-246-489-00	CARBON	4.7K	1/4W	
R643	1-246-483-00	CARBON	2.7K	1/4W	
R644	1-246-485-00	CARBON	3.3K	1/4W	
R645	1-246-476-00	CARBON	1.3K	1/4W	
R646	1-246-497-00	CARBON	10K	1/4W	
R647	1-246-489-00	CARBON	4.7K	1/4W	
R648	⚠.1-206-475-00	METAL-OXILE	33	2W	F
R649	1-246-471-00	CARBON	820	1/4W	
R650	⚠.1-205-697-00	CEMENT	15	5W	F
R651	1-246-471-00	CARBON	820	1/4W	
R652	⚠.1-247-983-00	CARBON	1.8	1/2W	F
R653	⚠.1-247-960-00	CARBON	270	1/2W	F
R654	1-246-475-00	CARBON	1.2K	1/4W	
R655	1-246-483-00	CARBON	2.7K	1/4W	

VARIABLE RESISTER

Ref.No.	Part No.	Description			Remark
RV621	1-228-989-11	RES, ADJ, METAL	470		
RV622	1-228-991-11	RES, ADJ, METAL	2.2K		

RELAY

Ref.No.	Part No.	Description			Remark
RY621	1-515-462-21	RELAY			

TRANSFORMER

Ref.No.	Part No.	Description			Remark
T601	⚠.1-447-677-11	TRANSFORMER, CONVERTOR			
T602	⚠.1-437-102-12	TRANSFORMER, DRIVE			

D BOARD
****

CAPACITOR

Ref.No.	Part No.	Description			Remark
C1	1-136-024-00	FILM	3600PF	50V	
C2	1-102-112-00	CERAMIC	330PF	50V	
C3	1-124-127-00	ECECT	100MF	25V	
C4	1-130-528-00	MYLAR	0.1MF	50V	
C5	1-124-511-00	ELECT	22MF	50V	
C6	1-124-511-00	ELECT	22MF	50V	
C7	1-123-875-00	ELECT	10MF	50V	

DIODE

Ref.No.	Part No.	Description			Remark
D1	=>8-719-815-85	DIODE 1S1585			
D2	=>8-719-815-85	DIODE 1S1585			
D3	=>8-719-815-85	DIODE 1S1585			

IC

Ref.No.	Part No.	Description			Remark
IC1	8-759-937-59	IC MB3759			

COIL

Ref.No.	Part No.	Description			Remark
L1	1-421-550-11	COIL			
L2	1-408-421-31	COIL			
L3	1-408-421-31	COIL			
L4	1-408-421-31	COIL			
L5	1-408-427-31	COIL			

RESISTOR

Ref.No.	Part No.	Description			Remark
R1	1-246-483-00	CARBON	2.7K	1/4W	
R2	1-246-501-00	CARBON	15K	1/4W	
R3	1-246-433-00	CARBON	22	1/4W	
R4	1-246-511-00	CARBON	39K	1/4W	
R5	1-246-529-00	CARBON	220K	1/4W	

TRANSFORMER

Ref.No.	Part No.	Description			Remark
T1	1-447-765-11	TRANSFORMER			

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

MISCELLANEOUS

****

Ref.No	Part No.	Description	Remark
	⚠.1-413-171-11	SWITCHING REGULATOR (SR-19E)	
	⚠.1-464-270-12	BOOSTER, RF MODULATOR(RFU-808)	
	1-520-470-11	METER UNIT, LEVEL	
	⚠.1-534-817-31	CORD POWER	
	♠:1-556-934-00	CABLE, PIN	
	8-825-508-10	HEAD, FE	
L901	1-464-286-00	SENSOR, S COIL	
L902	1-464-250-00	SENSOR, T COIL	
M902	8-838-048-01	MOTOR, DC (BHF-1908A)	
M904	X-3679-268-1	MOTOR ASSY, L	
PM901	⚠.1-454-348-31	SOLENOID, BRAKE PLUNGER	
PM902	⚠.1-454-365-21	SOLENOID, PLUNGER (PINCH)	
S601	⚠.1-552-903-12	SWITCH, PUSH POWER	
S901	1-554-374-00	SWITCH, LEVER (REC PROOF)	
S902	1-554-374-00	SWITCH, LEVER (CASSETTE DOWN)	
S903	1-553-539-00	SWITCH, MICRO (LOADING END)	
S904	1-553-718-00	SWITCH, MICRO (UNLOADING END)	

****

ACCESSORIES AND PACKING MATERIALS

****

Part No.	Description	Remark
A-6765-427-A	COMMANDER ASSY	
1-551-513-00	CABLE, COAXAL ASSY	
1-556-893-00	CORD ASSY, COAXIAL	
3-656-301-00	SCREWDRIVER, CONTROL	
3-677-503-00	SHEET, PROTECTION	
3-681-091-01	INDIVIDVAL CARTON	
3-681-287-01	LID, ACCESSORY CASE	
3-683-463-01	CASE, ACCESSORY	
3-684-089-01	CUSHION (UPPER)	
3-684-090-01	CUSHION (LOWER)	
3-701-630-00	BAG, POLYETHYLENE	
3-773-799-41	MANUAL, INSTRUCTION	
3-773-799-71	MANUAL, INSTRUCTION	
7-632-658-01	FILM	

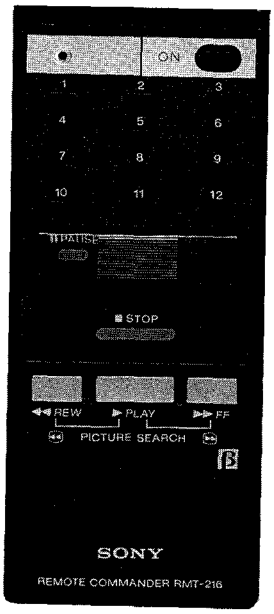
NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

RMT-216

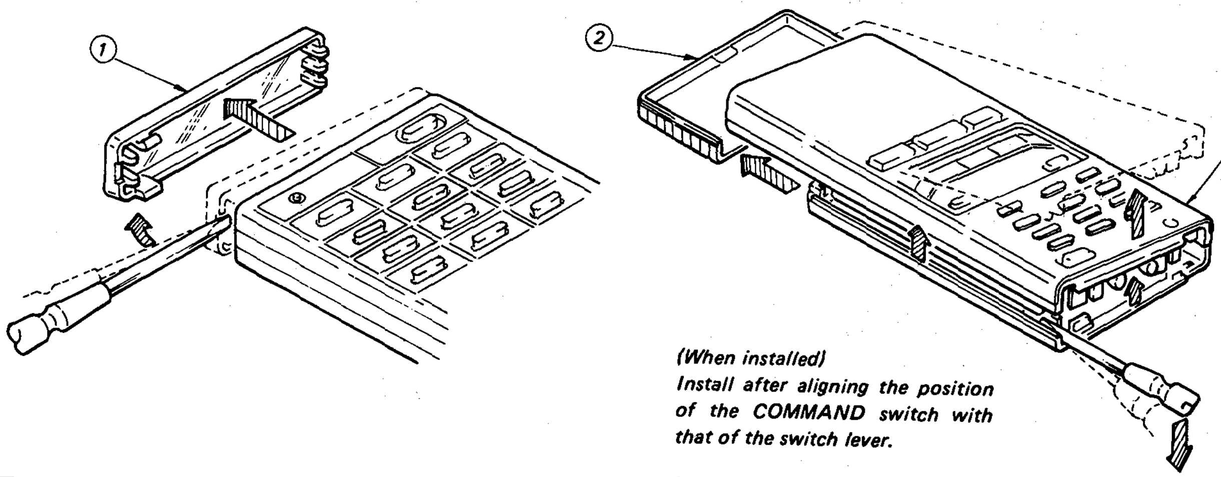
SERVICE MANUAL


ON
1
2
3
4
5
6
7
8
9
10
11
12
II PAUSE
■ STOP
◀◀ REW
▶ PLAY
▶▶ FF
PICTURE SEARCH
SONY
REMOTE COMMANDER RMT-216

SPECIFICATIONS

Remote control system	Infrared control
Power requirements	3V dc, 2 IEC designation R6 batteries (size AA)
Dimensions	Approx. 65 × 20 × 153 mm (w/h/d) ($2\frac{5}{8} \times \frac{13}{16} \times 6\frac{1}{8}$ inches) incl. projecting parts and controls
Weight	Approx. 140 g (5 oz) incl. batteries

DISASSEMBLY



(When installed)
Install after aligning the position of the COMMAND switch with that of the switch lever.

REMOTE COMMANDER

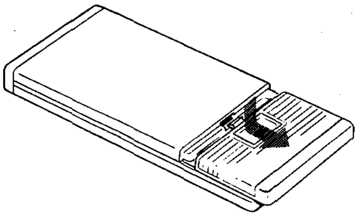
SONY®

1. REMOTE CONTROL OPERATION

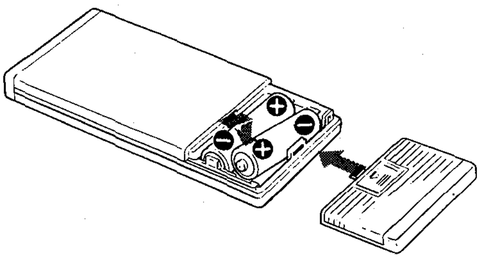
You can control almost all the functions of this video cassette recorder from your armchair using the supplied Remote Commander.

BATTERY INSERTION

1 Open the lid.



2 Insert two IEC designation R6 batterries with correct polarity.



3 Close the lid firmly.

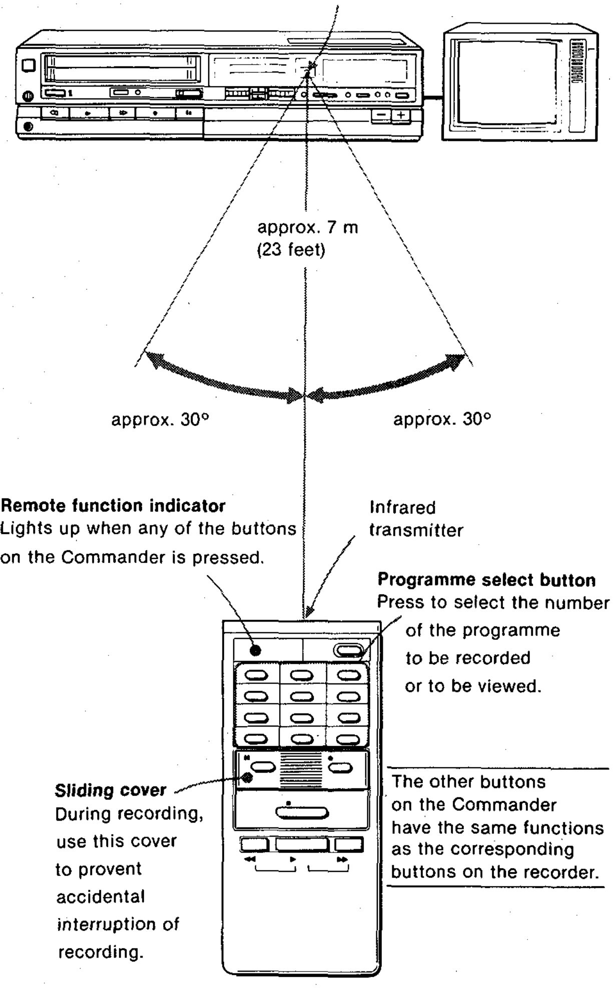
Battery life
In normal operation, batteries will last for about six months. If the range of the Remote Commander becomes noticeably short, replace the batteries with new ones. When the batteries are exhausted, the remote function indicator will not light when the buttons on the Commander are pressed.

If the Commander is not to be used for a long period of time, remove the batteries to avoid possible damage from battery leakage.

Notes

- There should be no obstacles between the Commander and the REMOTE SENSOR of the recorder.
- The shorter the distance between the Commander and the recorder, the wider the angle within which the recorder can be controlled.

OPERATION



Remote sensor
Point the infrared transmitter here.

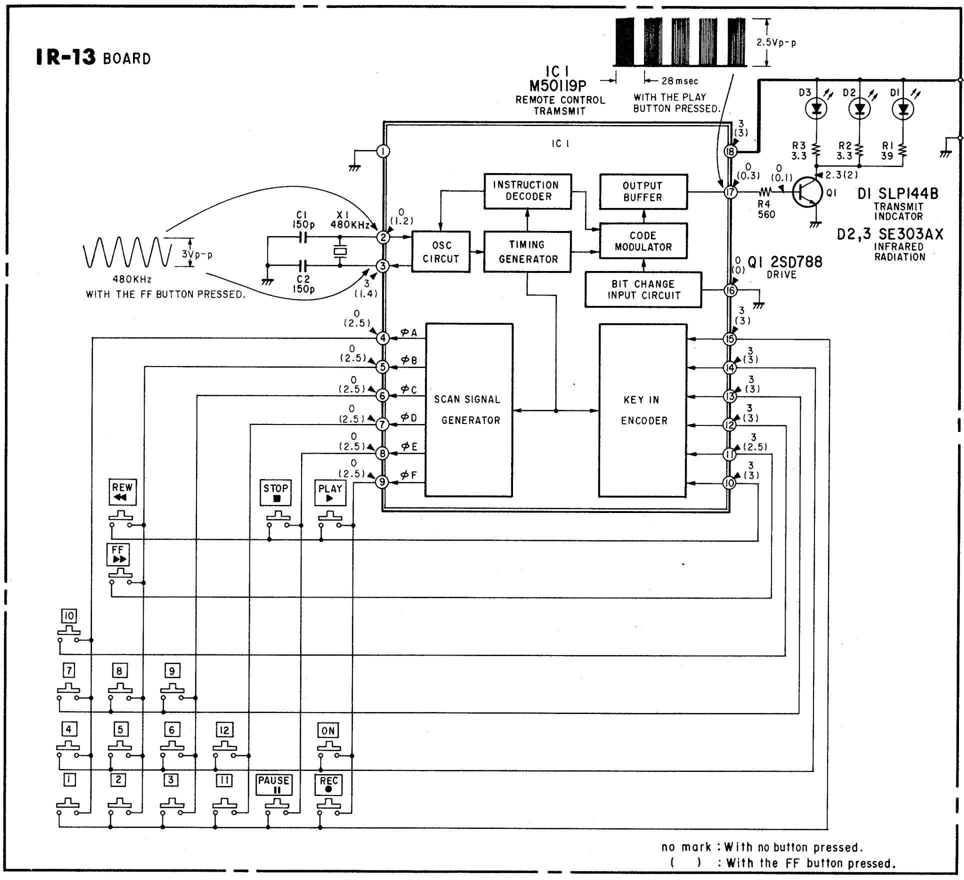
Remote function indicator
Lights up when any of the buttons on the Commander is pressed.

Programme select button
Press to select the number of the programme to be recorded or to be viewed.

Sliding cover
During recording, use this cover to provent accidental interruption of recording.

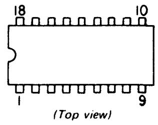
The other buttons on the Commander have the same functions as the corresponding buttons on the recorder.

2. SCHEMATIC DIAGRAM

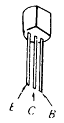

IR-13 BOARD
2.5Vp-p
IC1
M50119P
REMOTE CONTROL TRAMSMIT
28msec
WITH THE PLAY BUTTON PRESSED.
IC1
INSTRUCTION DECODER
OUTPUT BUFFER
OSC CIRCUT
TIMING GENERATOR
CODE MODULATOR
BIT CHANGE INPUT CIRCUIT
SCAN SIGNAL GENERATOR
KEY IN ENCODER
C1 150p
X1 480KHz
C2 150p
3Vp-p
480KHz
WITH THE FF BUTTON PRESSED.
D3 D2 D1
R3 3.3
R2 3.3
R1 39
R4 560
Q1
BATTERY SIZE "AA" (IEC DESIGNATION R6) 2PCS 3V
D1 SLP144B TRANSMIT INDCATOR
D2,3 SE303AX INFRARED RADIATION
Q1 2SD788 DRIVE
φA φB φC φD φE φF
REW
FF
STOP
PLAY
PAUSE
REC
ON
1 2 3 4 5 6 7 8 9 10 11 12

no mark : With no button pressed.
( ) : With the FF button pressed.

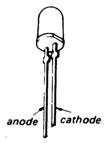
M50119P


18
10
1
9
(Top view)

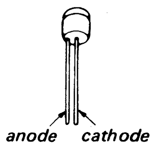
2SD788



SE303AX


anode
cathode

SLP144B


anode
cathode

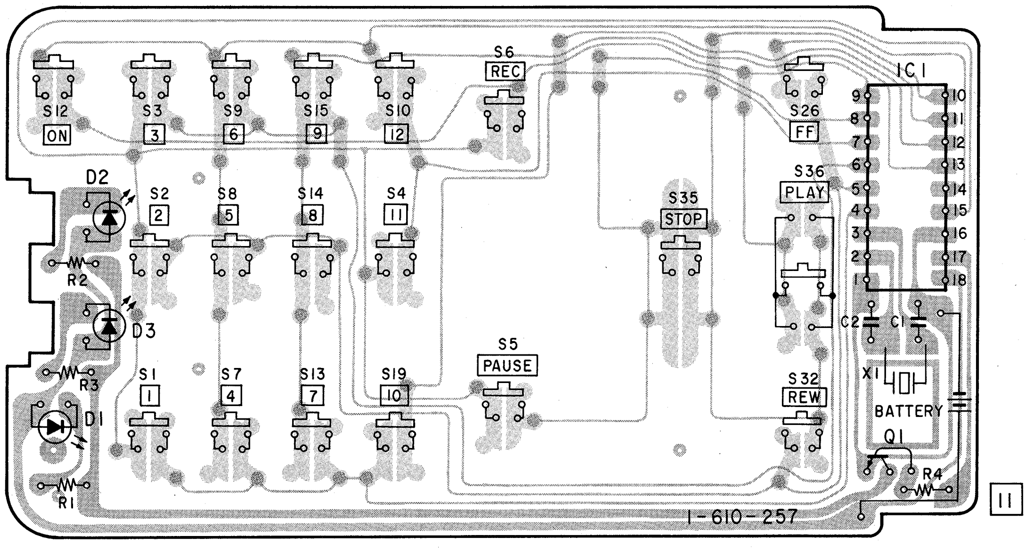
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- —— : B + bus.
- The voltage value is measured using a digital tester (10MΩ).
- ○— indicates a lead wire mounted on the component side.
- ●— indicates a lead wire mounted on the printed side.
- ▨ Conductor side (inner)
- ▨ Conductor side
- ▨ B + pattern

When indicating parts by reference number, please include the board name.

3. PRINTED WIRING BOARD

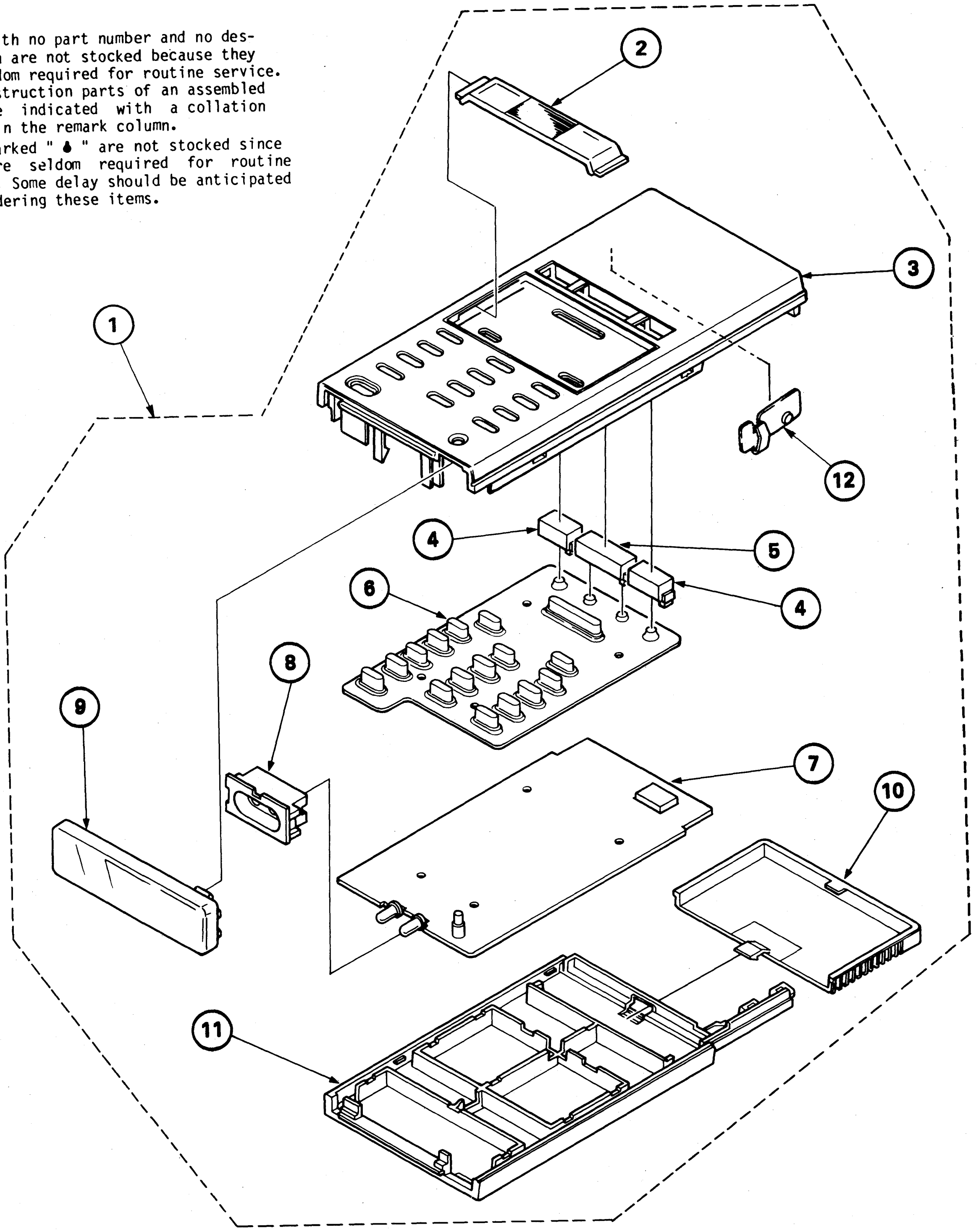
– Conductor Side –

IR-13 BOARD


S12 ON
S3 3
S9 6
S15 9
S10 12
S6 REC
S26 FF
IC1
S36 PLAY
S35 STOP
D2
S2 2
S8 5
S14 8
S4 11
R2
D3
R3
D1
R1
S1 1
S7 4
S13 7
S19 10
S5 PAUSE
S32 REW
C2 C1
X1
BATTERY
Q1
R4
1-610-257
11

4. EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remark
1	A-6765-427-A	COMMANDER ASSY (RMT-216)	2-12
2	2-290-603-00	CURSOR	
3	X-2290-638-1	CASE ASSY, UPPER (BLACK)	12
4	2-290-633-00	PUSH BUTTON (M)	
5	2-290-632-00	PUSH BUTTON (L)	
6	2-374-636-00	RUBBER (L), CONTACT	
7	♠:1-610-257-00	PC BOARD, IR-13	
8	2-298-402-00	MIRROR	
9	2-290-608-00	PLATE, FROSTED	
10	2-290-606-11	COVER, BATTERY	
11	2-290-611-11	CASE, LOWER	
12	4-350-925-00	TERMINAL (C), BATTERY	

5. ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : µF, PF : µµF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : µH

Ref.No	Part No.	Description				Remark
	♠:1-610-257-00	IR-13 BOARD ************				
	2-290-601-00	TERMINAL (A), BATTERY				
	2-290-602-00	TERMINAL (B), BATTERY				
		CAPACITOR				
C1	1-102-108-00	CERAMIC	150PF	10%	50V	
C2	1-102-108-00	CERAMIC	150PF	10%	50V	
		DIODE				
D1	8-719-901-44	DIODE SLP144B				
D2	8-719-193-03	DIODE SE303AX				
D3	8-719-193-03	DIODE SE303AX				
		IC				
IC1	8-759-600-07	IC M50119P				
		TRANSISTOR				
Q1	8-729-378-84	TRANSISTOR 2SD788-4				
		RESISTOR				
R1	1-247-797-00	CARBON	39	5%	1/6W	
R2	1-247-771-00	CARBON	3.3	5%	1/6W	
R3	1-247-771-00	CARBON	3.3	5%	1/6W	
R4	1-247-825-00	CARBON	560	5%	1/6W	
		CRYSTAL				
X1	1-527-476-00	OSCILLATOR, CERAMIC				

When indicating parts by reference number, please include the board name.

SL-HF100ES
RMT-216

9-972-308-01

Sony Corporation

English
84D0442-1
Printed in Japan

© 1984

SL-HF100EC
RMT-219

SONY®
SERVICE MANUAL

✓ 1419

EC Model

July, 1984

SUPPLEMENT-1

Subject: Silver Cabinet Model is now available

- This supplement contains only the points which differ from SL-HF100EC (Black).
- File this supplement with the service manual.

MICROFILM

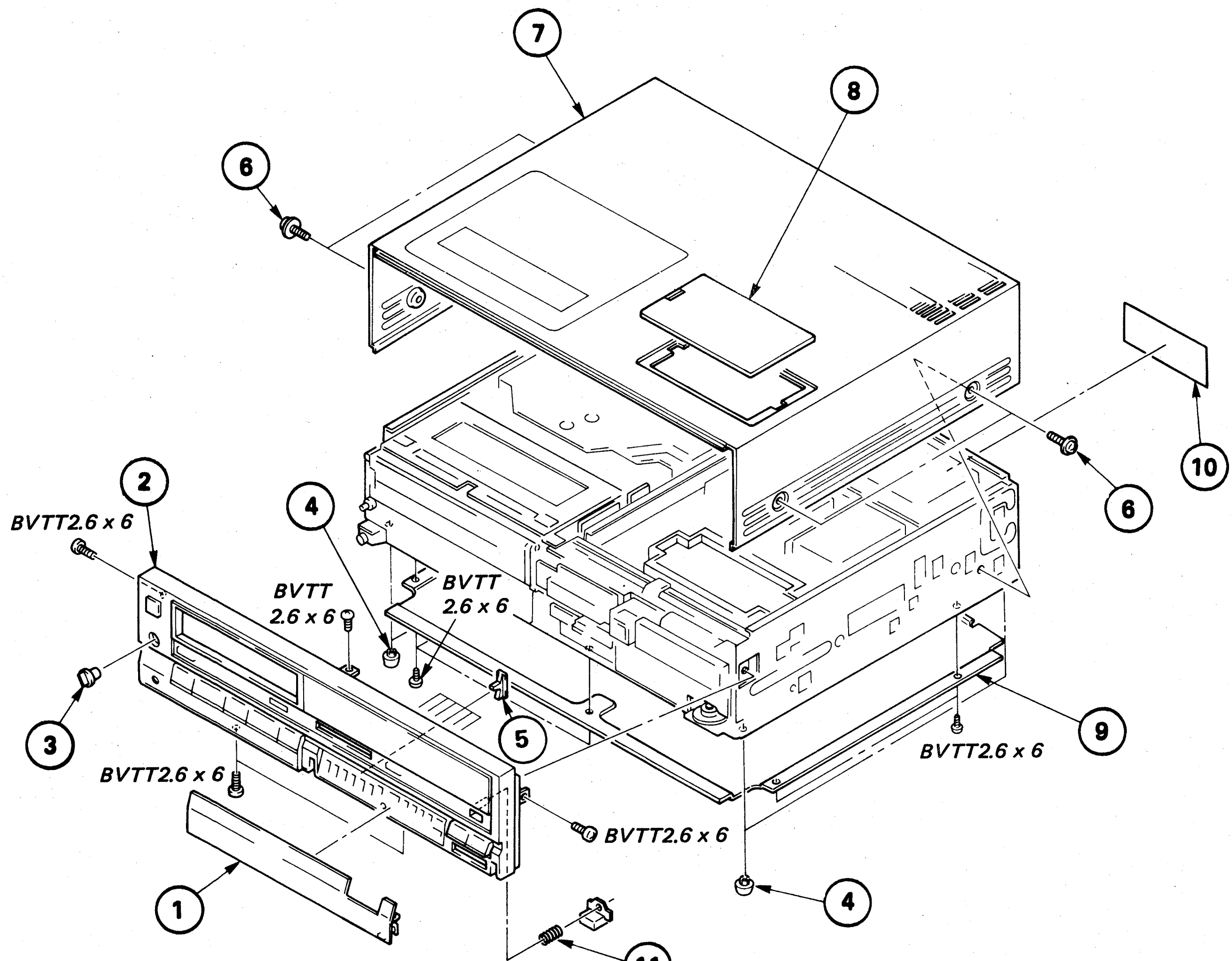
Consumer
VIDEO

EXPLODED VIEWS

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

FRONT PANEL AND CABINET ASSEMBLY



No.	Part No.	Description	Remark
1	X-3684-027-1	DOOR ASSY, FRONT	
2	X-3684-028-1	PANEL ASSY, FRONT	5,11
3	3-684-013-11	KNOB, CONTROL	
4	3-670-155-11	LEG	
5	3-684-035-01	BUTTON, SLIDE	
6	3-703-354-11	SCREW (OS), CASE, CLAW	
7	X-3684-023-1	CASE ASSY, UPPER	
8	3-681-218-00	DOOR, PRESET	
9	♠:3-684-056-01	PLATE, BOTTOM	
10	♠:3-684-069-01	LABEL, MODEL NUMBER	
11	4-864-435-00	SPRING, COMPRESSION	

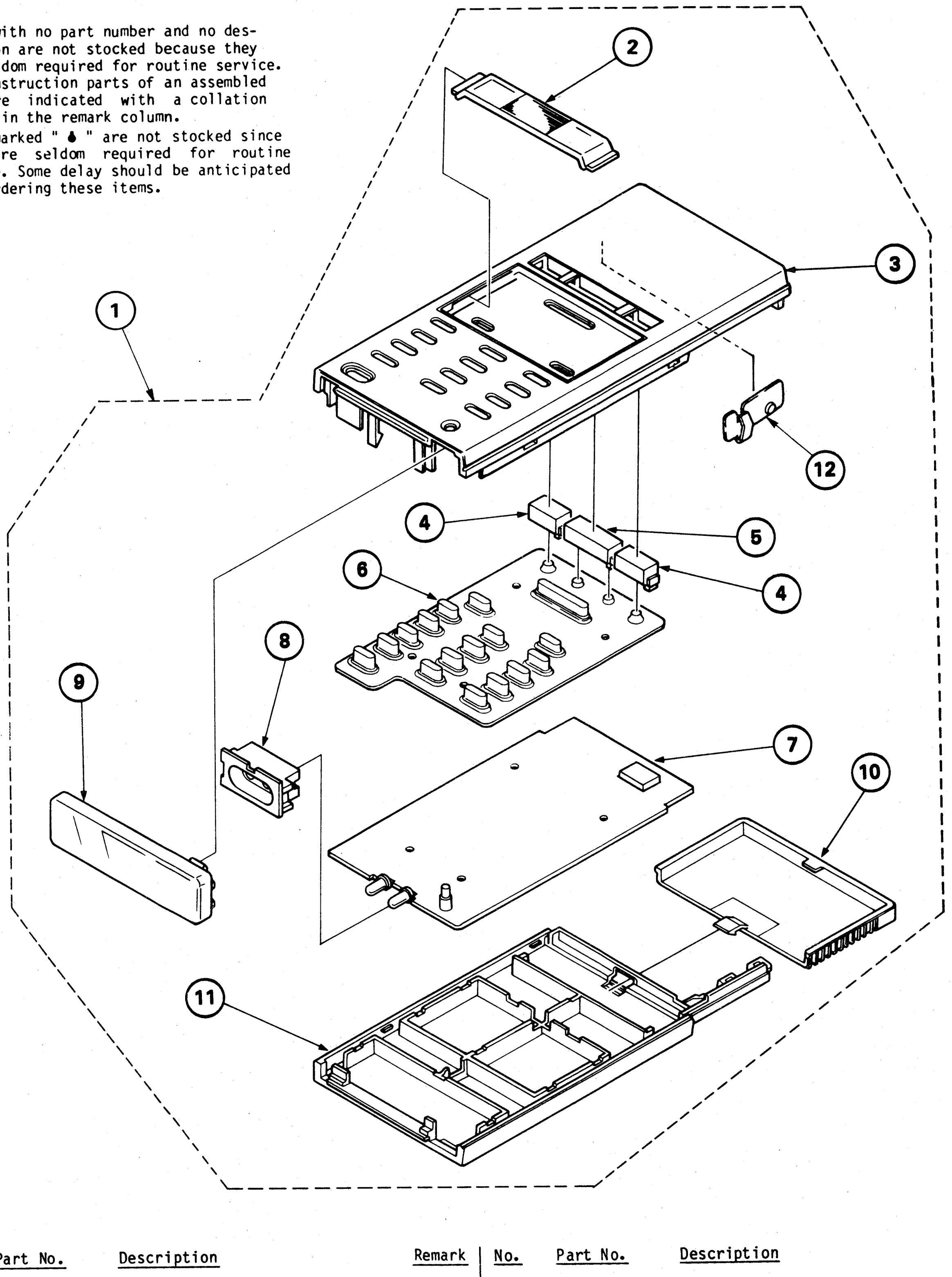
ACCESSORIE AND PACKING MATERIAL
****

Part No.	Description	Remark
3-684-096-11	INDIVIDUAL CARTON	

RMT-219

EXPLODED VIEW

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



No.	Part No.	Description	Remark
1	A-6765-274-A	COMMANDER ASSY (RMT-219)(SILVER)	2-12
2	2-290-603-00	CURSOR	
3	X-2290-621-0	CASING ASSY (SILVER)	12
4	2-290-633-31	PUSH BUTTON (M)	
5	2-290-632-31	PUSH BUTTON (L)	
6	2-374-636-00	RUBBER (L), CONTACT	
7	♠:1-610-257-00	IR-13 BOARD	
8	2-298-402-00	MIRROR	
9	2-290-608-00	PLATE, FROSTED	
10	2-290-606-00	COVER, BATTERY	
11	2-290-611-00	CASE, LOWER	
12	4-350-925-00	TERMINAL (C), BATTERY	

9-972-311-81

Sony Corporation

English
84G0436-1
Printed in Japan

© 1984

SL-HF100ES
RMT-216

SONY®

SERVICE MANUAL

√ 149

November, 1984

J28

SUPPLEMENT-2

Subject:

This supplement updates the service manual to include the revised schematic diagrams, printed wiring boards and electrical parts list for the video, servo system control, audio and tuner timer section as follows. File this supplement with the service manual.

Correction:

There are some incorrect portions on the service manual.
Please correct the overall block diagram, AFM level diagram.
There are mistakes in the method of adjustment (Supplement-1).
Please correct.

[Details of the Change]

1. **Video Section**

RP-17 Board
- The pattern has been changed.
- The end of part No. has been also changed from -11 to -12.

YC-28 Board
- The parts mounted on the conductor side have been mounted on the component side.
- Q15 has been changed to a digital transistor (transistor with resistors).
- The end of part No. has been also changed from -11 to -12.

2. **Servo System Control Section**

SS-28 Board
- Q017, Q023, Q307, Q308, Q310, Q317 have been changed to digital transistor (transistor with resistor).

3. **Audio Section**

AF-3 Board
- The end of part No. has been changed to -13.
  DM-10 board has been mounted on AF-3 board.
  Q018 has been deleted. (See page 25.)
- The end of part No. has been changed to -14 or -15. (See page 33.)
  Q013, Q016, Q711, Q712, Q713, Q714 and Q715 have been deleted.
  Q715, Q728, Q729, IC021 and IC022 have been added.
  IC020 has been changed from MB88201-152G to MB88201-167G.

AM-5 Board
- D508 has been changed from TLR123 to RD3.3E-B1.

4. **Tuner Timer Section**

TU-60 Board
- D402, Q301, Q302, Q303, Q401, Q402 and Q403 have been deleted.
- IC101 has been changed from M50160-018SP to M50160-019SP.
- IC003 has been changed from TDA3800AS to TDA3800GS.
- Q404 has been added.

TM-54 Board
- IC101 has been changed from μPD7519G-053 to μPD7519G-132.

In addition to the above items, the valves of resistors and capacitors have been changed.

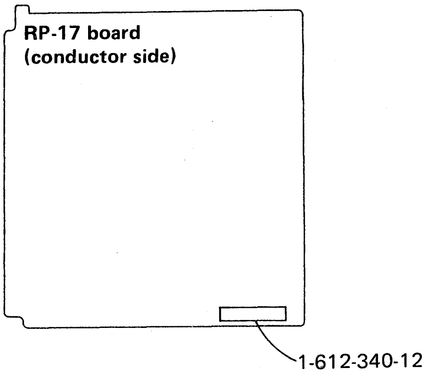
— Continued on next page —

MICROFILM

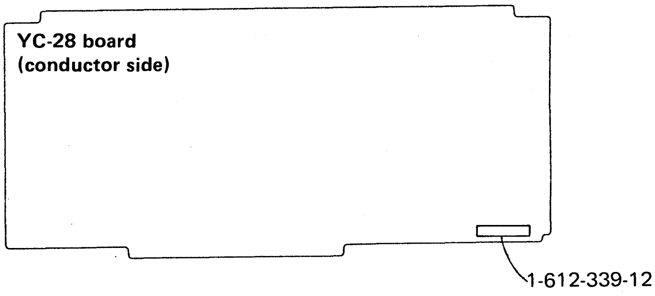
Consumer
VIDEO

The part No. of the circuit board is indicated on the board as shown below.

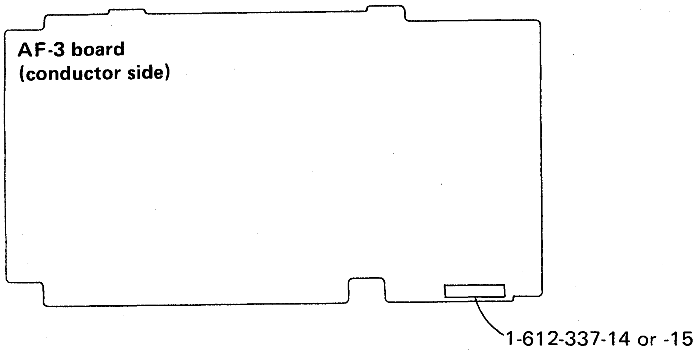
RP-17 Board


RP-17 board
(conductor side)
1-612-340-12

YC-28 Board


YC-28 board
(conductor side)
1-612-339-12

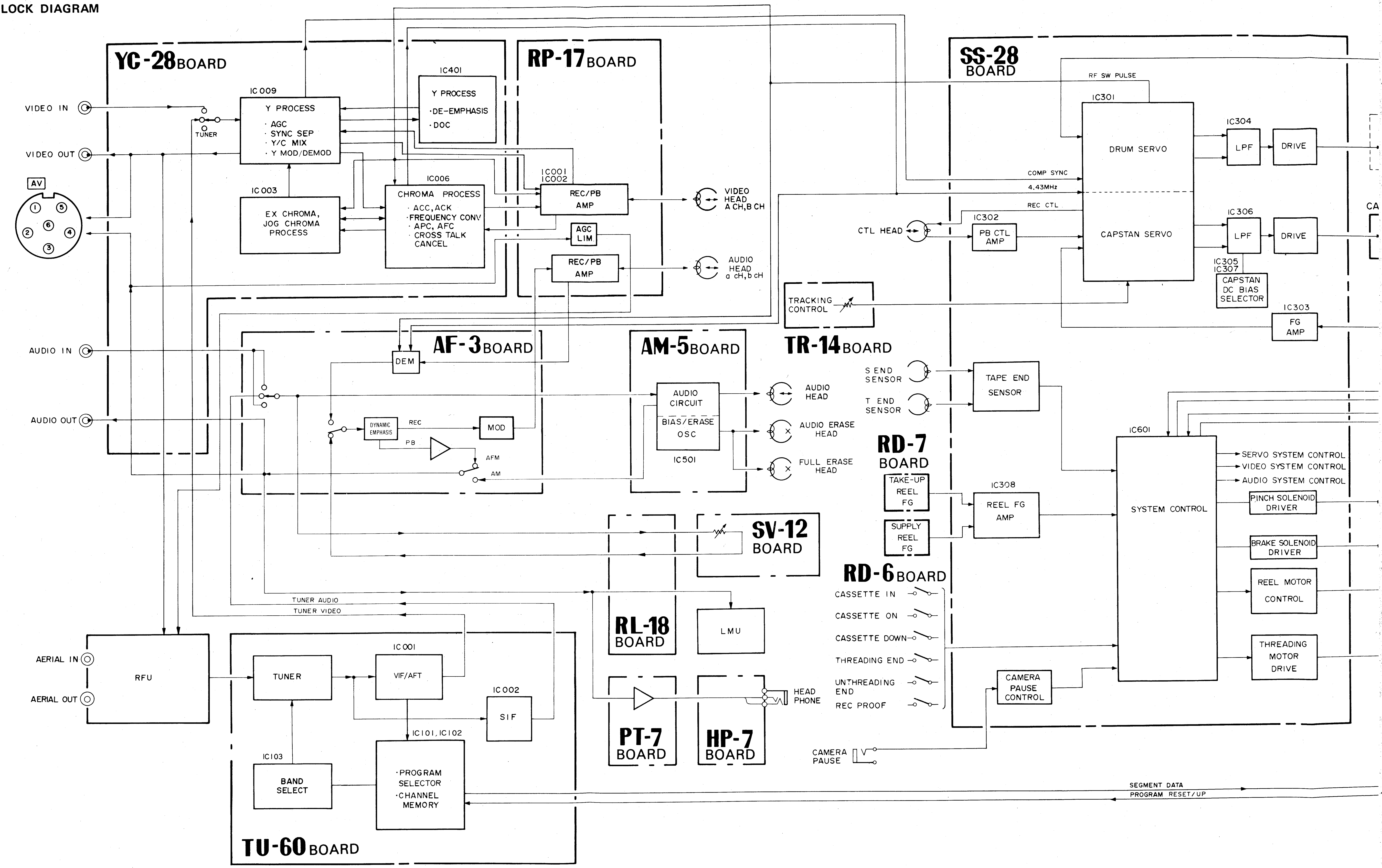
AF-3 Board

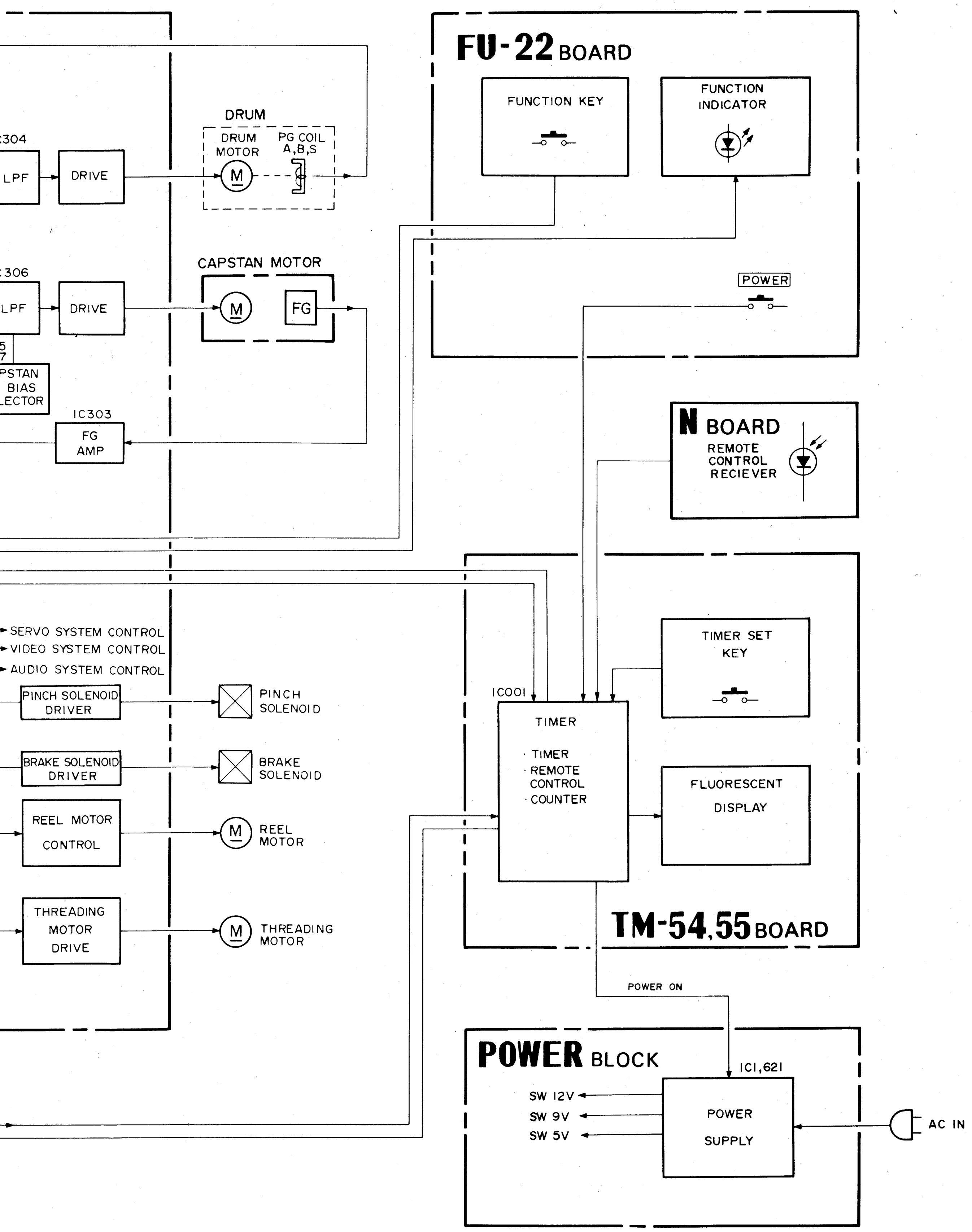

AF-3 board
(conductor side)
1-612-337-14 or -15

DIAGRAMS

CORRECTION

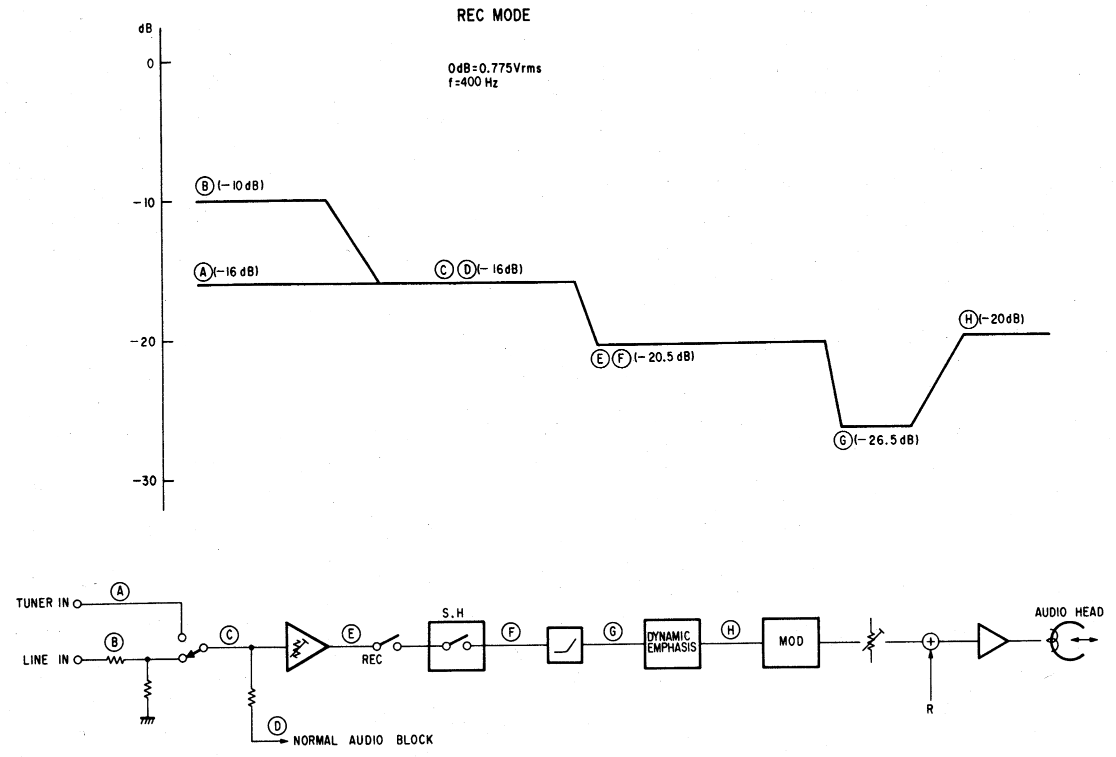
OVERALL BLOCK DIAGRAM


YC-28 BOARD
VIDEO IN
VIDEO OUT
AV
TUNER
IC009
Y PROCESS
· AGC
· SYNC SEP
· Y/C MIX
· Y MOD/DEMOD
IC003
EX CHROMA, JOG CHROMA PROCESS
IC401
Y PROCESS
· DE-EMPHASIS
· DOC
IC006
CHROMA PROCESS
· ACC, ACK
· FREQUENCY CONV
· APC, AFC
· CROSS TALK CANCEL
RP-17 BOARD
IC001
IC002
REC/PB AMP
AGC LIM
REC/PB AMP
VIDEO HEAD A CH, B CH
AUDIO HEAD a cH, b cH
AUDIO IN
AUDIO OUT
AF-3 BOARD
DEM
DYNAMIC EMPHASIS
REC
PB
MOD
AFM
AM
AM-5 BOARD
AUDIO CIRCUIT
BIAS/ERASE OSC
IC501
AUDIO HEAD
AUDIO ERASE HEAD
FULL ERASE HEAD
TRACKING CONTROL
TR-14 BOARD
CTL HEAD
S END SENSOR
T END SENSOR
RD-7 BOARD
TAKE-UP REEL FG
SUPPLY REEL FG
RD-6 BOARD
CASSETTE IN
CASSETTE ON
CASSETTE DOWN
THREADING END
UNTHREADING END
REC PROOF
CAMERA PAUSE
SV-12 BOARD
RL-18 BOARD
LMU
PT-7 BOARD
HP-7 BOARD
HEAD PHONE
TUNER AUDIO
TUNER VIDEO
AERIAL IN
AERIAL OUT
RFU
TU-60 BOARD
TUNER
IC001
VIF/AFT
IC002
SIF
IC103
BAND SELECT
IC101, IC102
· PROGRAM SELECTOR
· CHANNEL MEMORY
SS-28 BOARD
RF SW PULSE
IC301
DRUM SERVO
COMP SYNC
4.43MHz
REC CTL
CAPSTAN SERVO
IC302
PB CTL AMP
IC304
LPF
DRIVE
IC306
LPF
DRIVE
IC305
IC307
CAPSTAN DC BIAS SELECTOR
IC303
FG AMP
TAPE END SENSOR
IC308
REEL FG AMP
IC601
SYSTEM CONTROL
SERVO SYSTEM CONTROL
VIDEO SYSTEM CONTROL
AUDIO SYSTEM CONTROL
PINCH SOLENOID DRIVER
BRAKE SOLENOID DRIVER
REEL MOTOR CONTROL
THREADING MOTOR DRIVE
CAMERA PAUSE CONTROL
SEGMENT DATA
PROGRAM RESET/UP
CA

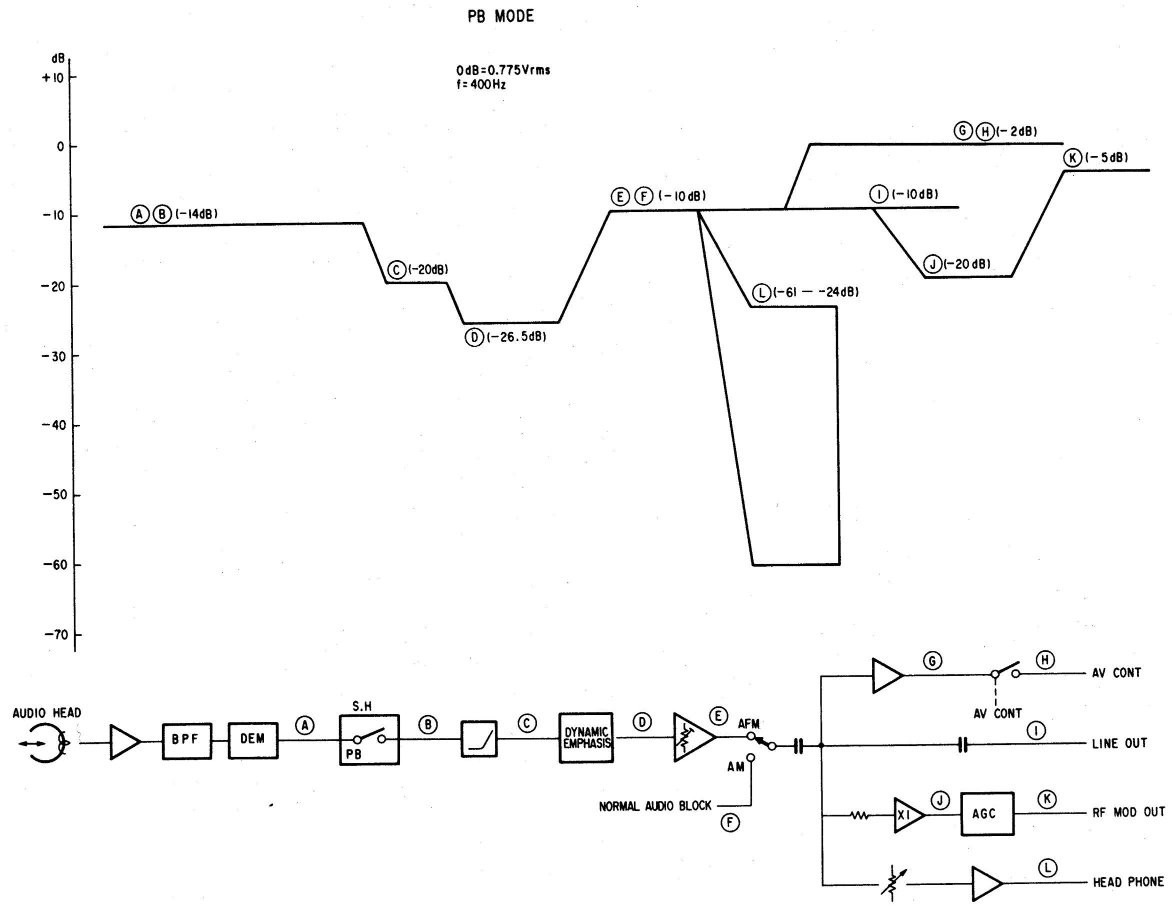

:304
LPF
DRIVE
DRUM
DRUM MOTOR
M
PG COIL A,B,S
:306
LPF
DRIVE
CAPSTAN MOTOR
M
FG
5
7
PSTAN
BIAS
LECTOR
IC303
FG AMP
FU-22 BOARD
FUNCTION KEY
FUNCTION INDICATOR
POWER
N BOARD
REMOTE CONTROL RECIEVER
SERVO SYSTEM CONTROL
VIDEO SYSTEM CONTROL
AUDIO SYSTEM CONTROL
PINCH SOLENOID DRIVER
PINCH SOLENOID
BRAKE SOLENOID DRIVER
BRAKE SOLENOID
REEL MOTOR CONTROL
M
REEL MOTOR
THREADING MOTOR DRIVE
M
THREADING MOTOR
IC001
TIMER
· TIMER
· REMOTE CONTROL
· COUNTER
TIMER SET KEY
FLUORESCENT DISPLAY
TM-54,55 BOARD
POWER ON
POWER BLOCK
IC1,621
SW 12V
SW 9V
SW 5V
POWER SUPPLY
AC IN

CORRECTION

AFM LEVEL DIAGRAM (REC)



AFM LEVEL DIAGRAM (PB)



SCHEMATIC DIAGRAM AND PRINTED WIRING BOARDS

VIDEO VIDEO

RP-17 (LOW-CONVERTED CHROMA, Y-FM & AFM SIGNALS, RECORD/PLAYBACK AMP), YC-28 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS) SCHEMATIC DIAGRAM

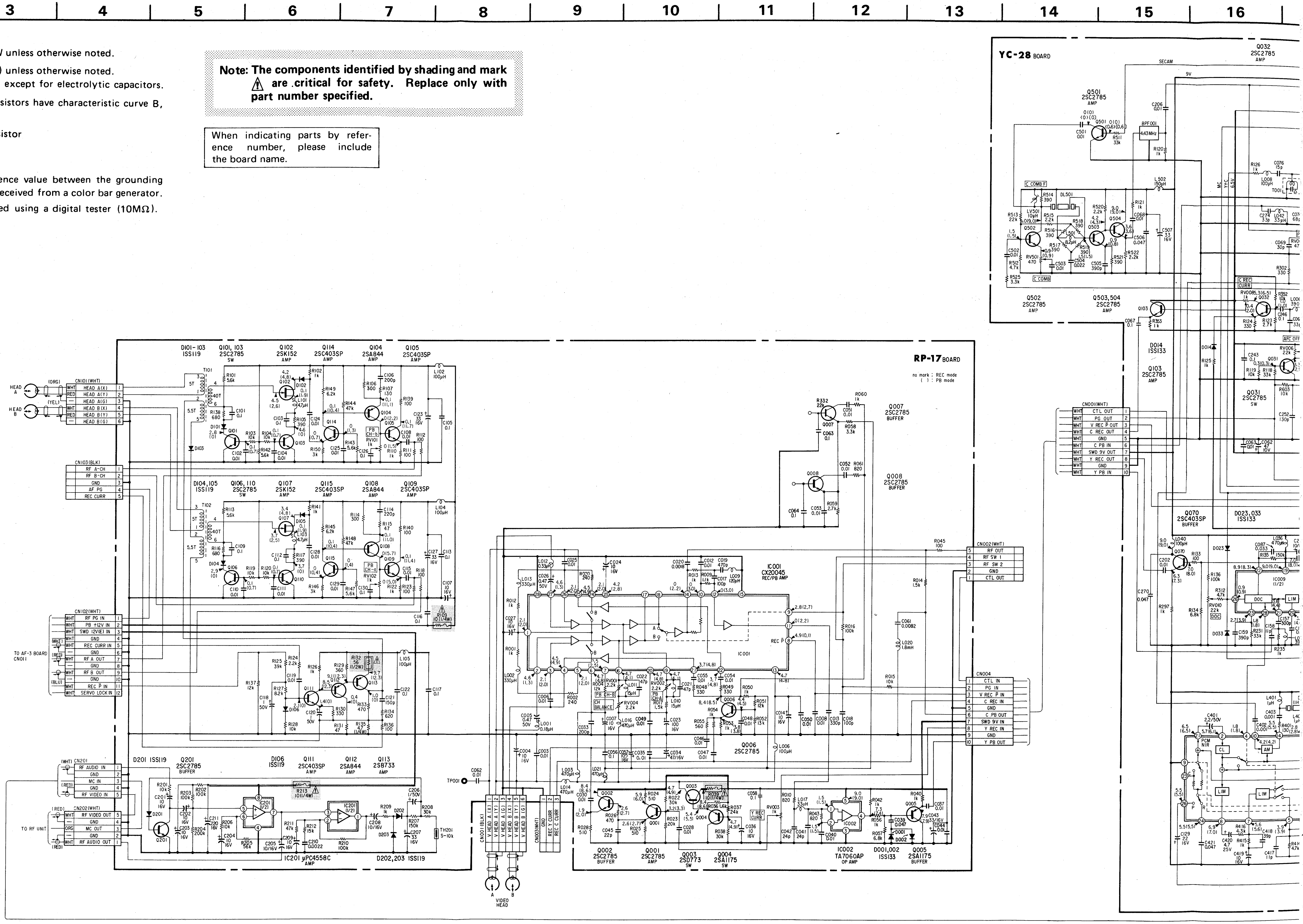
– Ref. No. RP-17 BOARD : 2000 series, YC-28 BOARD : 1000 series –

Note:

- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ▭ : Fusible resistor
- —— : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.



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A
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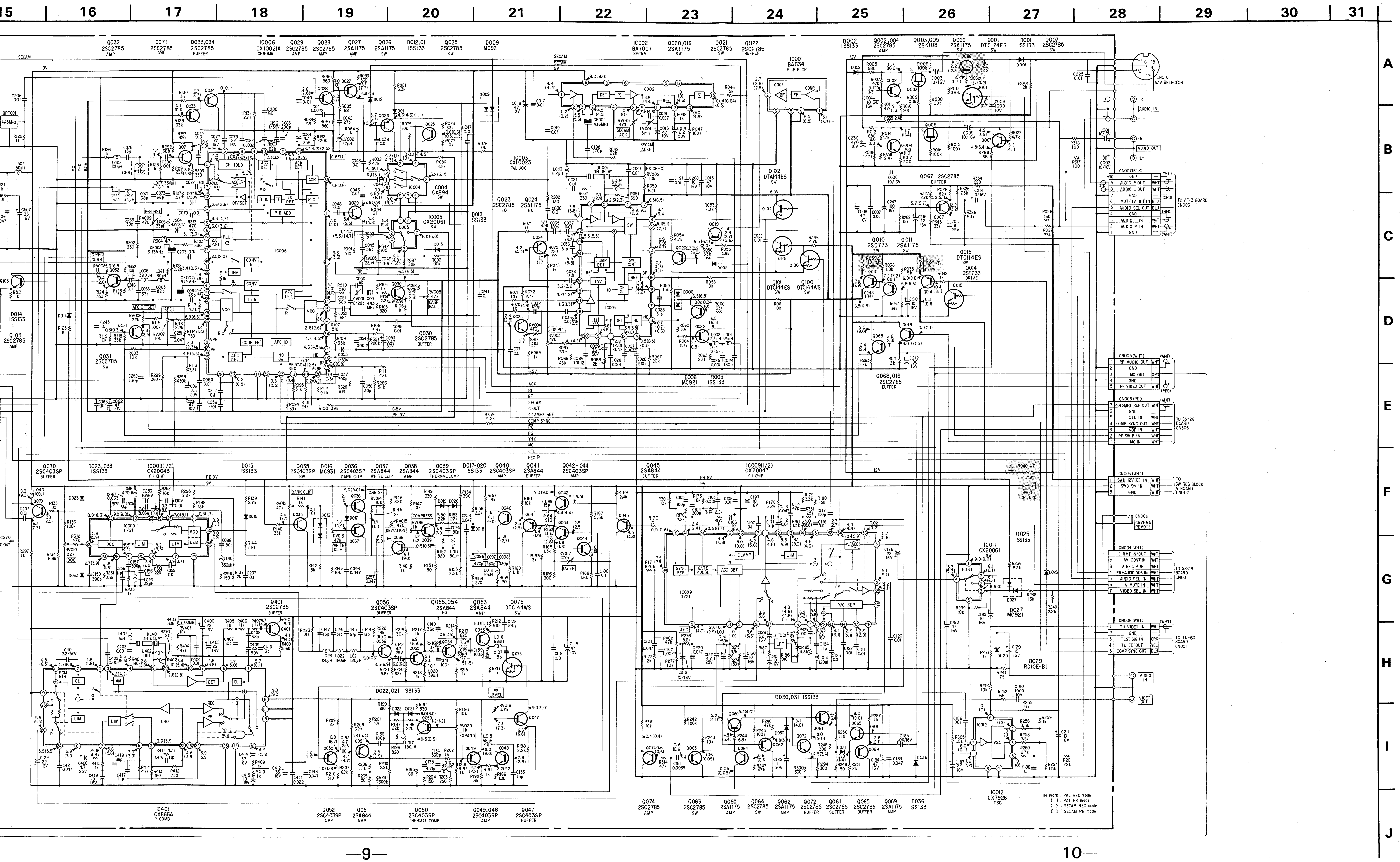
I
J
YC-28 BOARD
Q032 2SC2785 AMP
Q501 2SC2785 AMP
BPF001 4.43MHz
DL501
Q502 2SC2785 AMP
Q503,504 2SC2785 AMP
C COMB F
C COMB
C REC CURR
Q103 2SC2785 AMP
D014 ISS133
Q031 2SC2785 SW
CN001(WHT)
CTL OUT
PG OUT
V REC P OUT
C REC OUT
GND
C PB IN
SWD 9V OUT
Y REC OUT
GND
Y PB IN
Q070 2SC403SP BUFFER
D023,033 ISS133
IC009 (1/2)
DOC
LIM
CL
AM
PCM NIR
RP-17 BOARD
no mark : REC mode
( ) : PB mode
D101-103 ISS119
Q101,103 2SC2785 SW
Q102 2SK152 AMP
Q114 2SC403SP AMP
Q104 2SA844 AMP
Q105 2SC403SP AMP
D104,105 ISS119
Q106,110 2SC2785 SW
Q107 2SK152 AMP
Q115 2SC403SP AMP
Q108 2SA844 AMP
Q109 2SC403SP AMP
T101
T102
HEAD A
HEAD B
CN101(WHT)
HEAD A(X)
HEAD A(Y)
HEAD A(G)
HEAD B(X)
HEAD B(Y)
HEAD B(G)
CN103(BLK)
RF A-CH
RF B-CH
GND
AF PG
REC CURR
CN102(WHT)
RF PG IN
PB +12V IN
SWD 12V(E) IN
GND
REC CURR IN
GND
RF A OUT
GND
RF B OUT
GND
REC P IN
SERVO LOCK IN
TO AF-3 BOARD CN011
CN201
RF AUDIO IN
GND
MC IN
GND
RF VIDEO IN
CN202(WHT)
RF VIDEO OUT
GND
MC OUT
GND
RF AUDIO OUT
TO RF UNIT
D201 ISS119
Q201 2SC2785 BUFFER
D106 ISS119
Q111 2SC403SP AMP
Q112 2SA844 AMP
Q113 2SB733 AMP
IC201 μPC4558C AMP
D202,203 ISS119
Q007 2SC2785 BUFFER
Q008 2SC2785 BUFFER
IC001 CX20045 REC/PB AMP
CH BALANCE
Q006 2SC2785
CN002(WHT)
RF OUT
RF SW 1
RF SW 2
GND
CTL OUT
CN004
CTL IN
PG IN
V REC P IN
C REC IN
GND
C PB OUT
SWD 9V IN
Y REC IN
GND
Y PB OUT
CN001(BLK)
CN003(WHT)
TP001
VIDEO HEAD
Q002 2SC2785 BUFFER
Q001 2SC2785 AMP
Q003 2SD773 SW
Q004 2SA1175 SW
IC002 TA7060AP OP AMP
D001,002 ISS133
Q005 2SA1175 BUFFER

VIDEO VIDEO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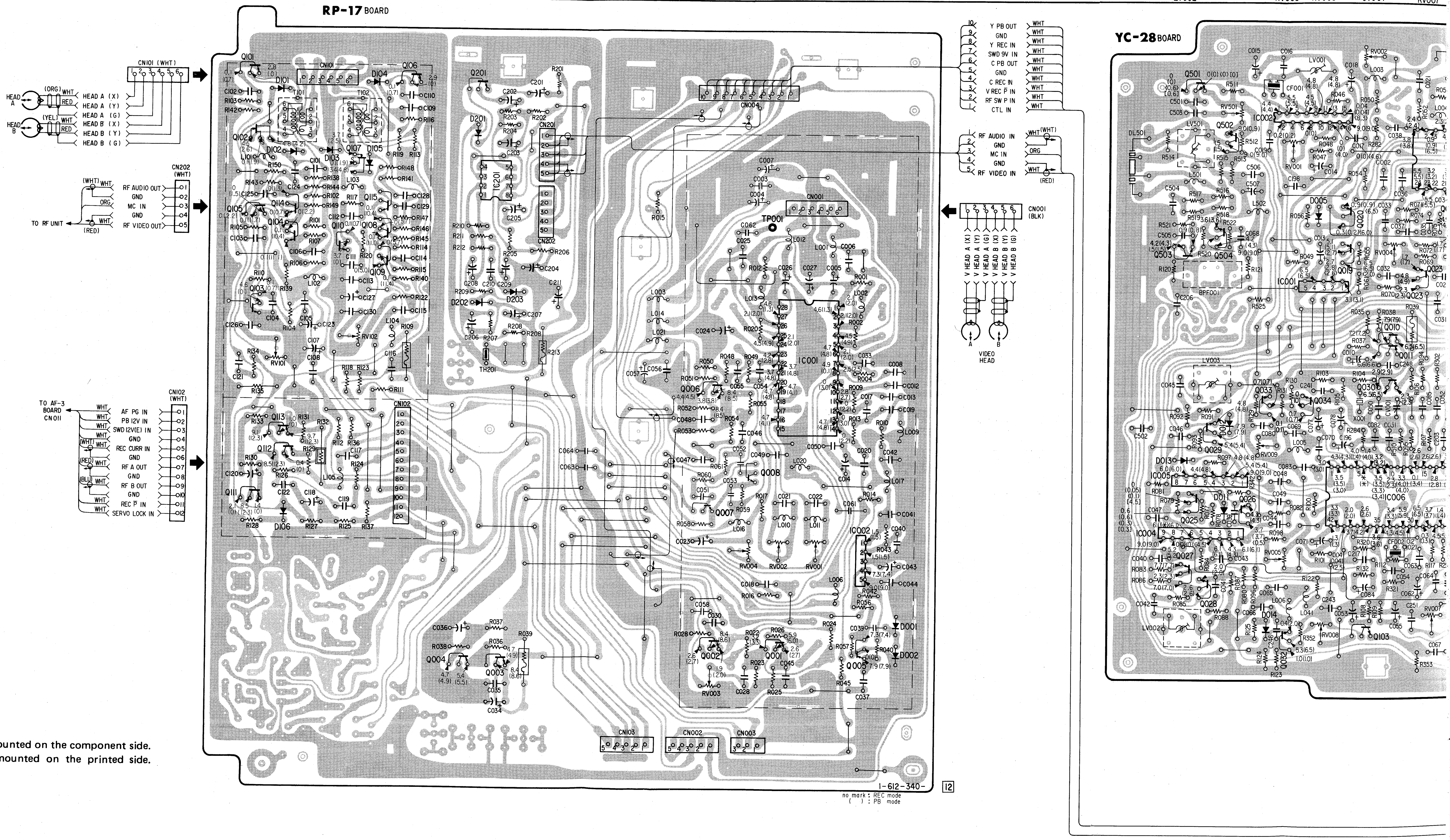
I
J
IC006 CX10021A CHROMA
IC004 CX894 SW
IC005 CX20061 SW
IC003 CX10023 PAL JOG
IC002 BA7007 SECAM
IC001 BA634 FLIP FLOP
IC009(1/2) CX20043 Y I CHIP
IC401 CX866A Y COMB
IC011 CX20061 SW
IC012 CX7926 TSG
Q102 DTA144ES SW
Q101 DTC144ES SW
Q100 DTC144WS SW
Q010 2SD773 SW
Q011 2SA1175 SW
Q015 DTC114ES SW
Q014 2SB733 DRIVE
Q068,016 2SC2785 BUFFER
Q067 2SC2785 BUFFER
Q030 2SC2785 BUFFER
Q031 2SC2785 SW
Q103 2SC2785 AMP
Q401 2SC2785 BUFFER
Q070 2SC403SP BUFFER
Q045 2SA844 BUFFER
D014 1SS133
D013 1SS133
D006 MC921
D005 1SS133
D025 1SS133
D027 MC921
D029 RD10E-B1
CN010 A/V SELECTOR
AUDIO IN
AUDIO OUT
CN007(BLK)
TO AF-3 BOARD CN003
CN005(WHT)
CN008(RED)
TO SS-28 BOARD CN306
CN003 (WHT)
TO SW REG BLOCK M BOARD CN002
CN009 CAMERA REMOTE
CN004 (WHT)
TO SS-28 BOARD CN601
CN006(WHT)
TO TU-60 BOARD CN001
VIDEO IN
VIDEO OUT
PS001 ICP-N20
no mark : PAL REC mode
( ) : PAL PB mode
< > : SECAM REC mode
[ ] : SECAM PB mode

RP-17 (LOW-CONVERTED CHROMA, Y-FM & AFM SIGNALS, RECORD/PLAYBACK AMP), YC-28 (Y & CHROMA SIGNALS RECORD/PLAYBACK PROCESS) PRINTED WIRING BOARDS

– Ref. No. RP-17 BOARD : 2000 series, YC-28 BOARD : 1000 series –

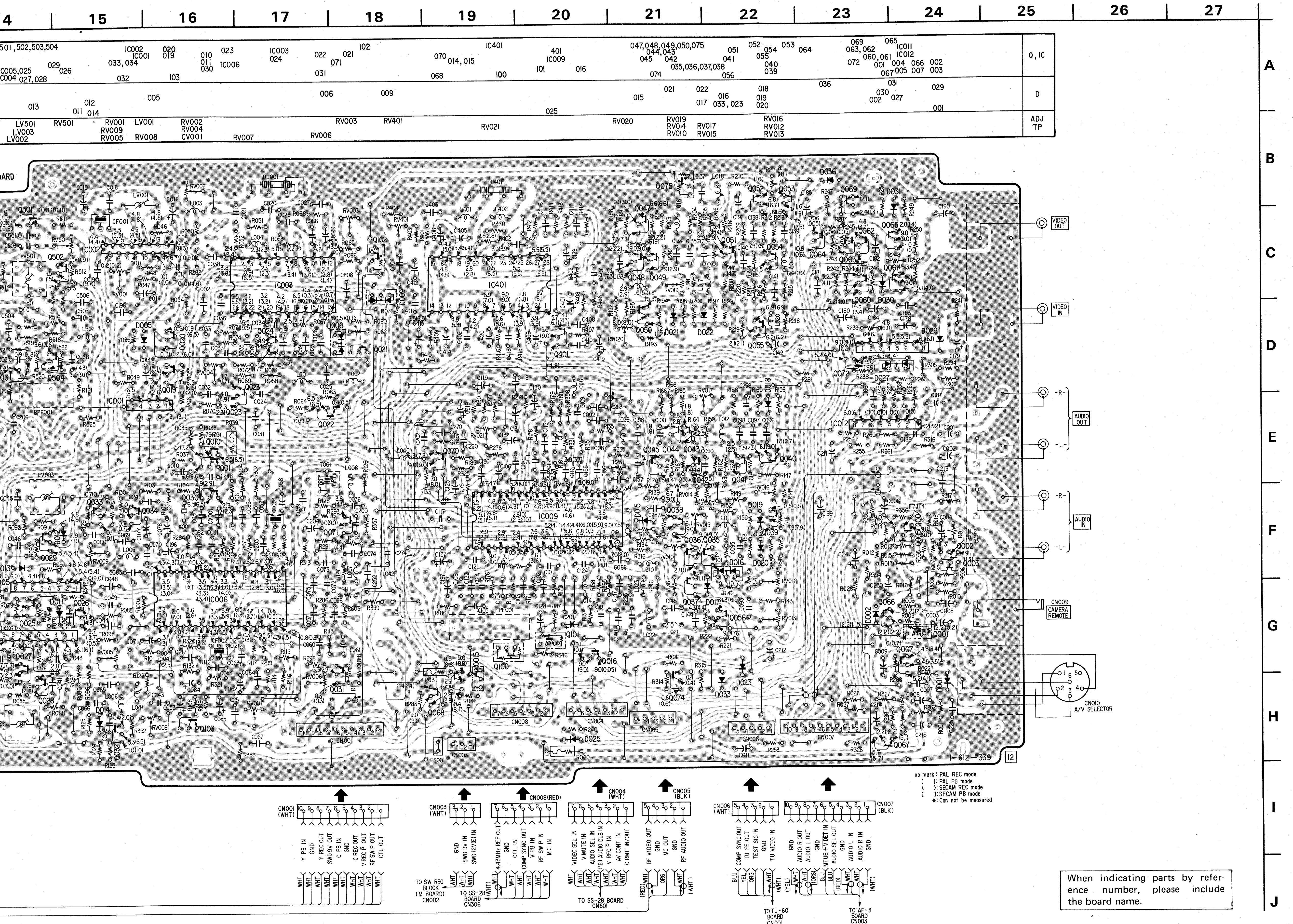
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Q, IC					101 102 105 103 111 114 104 113 112	107 110 115 108 109 106	201 IC201 004 003		006 002	IC001 001	IC002 005			501,502,503,504 IC005,025 IC004 027,028	029 026 IC002 IC001 033, 034 032	020 019 103 010 011 030 023 IC006	
D					101 102 106	103 104 105	201 202, 203				001 002			013	012 011 014	005	
ADJ TP					RV101	RV102			RV003	TP001 RV004 RV002 RV001				LV501 LV003 LV002	RV501 RV001 RV009 RV005	LV001 RV008 RV002 RV004 CV001	RV007


RP-17 BOARD
YC-28 BOARD
CN101 (WHT)
HEAD A
HEAD B
(ORG) WHT
RED
(YEL) WHT
RED
HEAD A (X)
HEAD A (Y)
HEAD A (G)
HEAD B (X)
HEAD B (Y)
HEAD B (G)
CN202 (WHT)
TO RF UNIT
(WHT) WHT
ORG
WHT
(RED)
RF AUDIO OUT
GND
MC IN
GND
RF VIDEO OUT
TO AF-3 BOARD CN011
CN102 (WHT)
AF PG IN
PB 12V IN
SWD 12V(E) IN
GND
REC CURR IN
GND
RF A OUT
GND
RF B OUT
GND
REC P IN
SERVO LOCK IN
Y PB OUT
GND
Y REC IN
SWD 9V IN
C PB OUT
GND
C REC IN
V REC P IN
RF SW P IN
CTL IN
RF AUDIO IN
GND
MC IN
GND
RF VIDEO IN
(WHT)
ORG
(RED)
CN001 (BLK)
V HEAD A (X)
V HEAD A (Y)
V HEAD A (G)
V HEAD B (X)
V HEAD B (Y)
V HEAD B (G)
VIDEO HEAD
CN103
CN002
CN003
TP001
IC001
IC002
IC201
1-612-340-
12
1-612-340- [12]

no mark : REC mode
( ) : PB mode

Note:

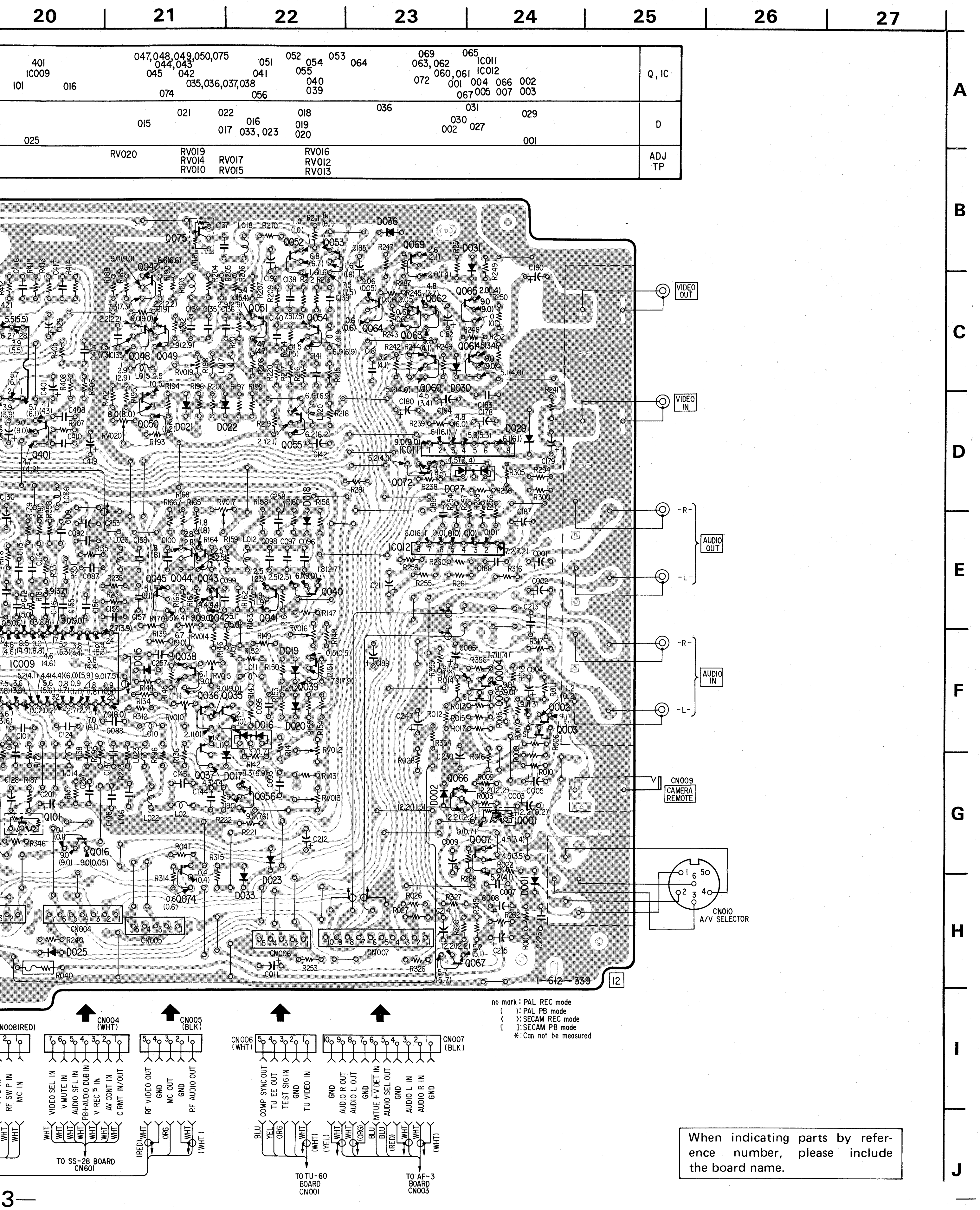
- ○—— : indicates a lead wire mounted on the component side.
- ●—— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern


Q, IC
D
ADJ TP
VIDEO OUT
VIDEO IN
AUDIO OUT
AUDIO IN
CN009 CAMERA REMOTE
CN010 A/V SELECTOR
IC401
IC009
IC003
IC006
IC001
1-612-339
12
CN001 (WHT)
CN003 (WHT)
CN008 (RED)
CN004 (WHT)
CN005 (BLK)
CN006 (WHT)
CN007 (BLK)
TO SW REG BLOCK (M BOARD) CN002
TO SS-28 BOARD CN306
TO SS-28 BOARD CN601
TO TU-60 BOARD CN001
TO AF-3 BOARD CN003

no mark : PAL REC mode
( ): PAL PB mode
< >: SECAM REC mode
[ ]: SECAM PB mode
✻: Can not be measured

When indicating parts by reference number, please include the board name.

20	21	22	23	24	25
401 IC009 101 016	047,048,049,050,075 044,043 045 042 035,036,037,038 074	051 052 054 053 055 041 040 039 056	064 069 063,062 072 060,061 001 067	065 IC011 IC012 004 005 066 007 002 003	Q, IC
025	015 021	022 017 016 033, 023 018 019 020	036 030 002	031 027 029 001	D
	RV020 RV019 RV014 RV010	RV017 RV015 RV016 RV012 RV013			ADJ TP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VIDEO OUT
VIDEO IN
-R-
-L-
AUDIO OUT
-R-
-L-
AUDIO IN
CN009 CAMERA REMOTE
CN010 A/V SELECTOR
1-612-339
12
CN008(RED)
RF SW P IN
MC IN
CN004 (WHT)
VIDEO SEL IN
V MUTE IN
AUDIO SEL IN
PB+AUDIO DUB IN
V REC P IN
AV CONT IN
C RMT IN/OUT
TO SS-28 BOARD CN601
CN005 (BLK)
RF VIDEO OUT
GND
MC OUT
GND
RF AUDIO OUT
CN006 (WHT)
COMP SYNC OUT
TU EE OUT
TEST SIG IN
GND
TU VIDEO IN
TO TU-60 BOARD CN001
CN007 (BLK)
GND
AUDIO R OUT
AUDIO L OUT
GND
MTUE + V DET IN
AUDIO SEL OUT
GND
AUDIO L IN
AUDIO R IN
GND
TO AF-3 BOARD CN003
WHT
ORG
BLU
YEL
(RED)
(WHT)
(YEL)
(ORG)

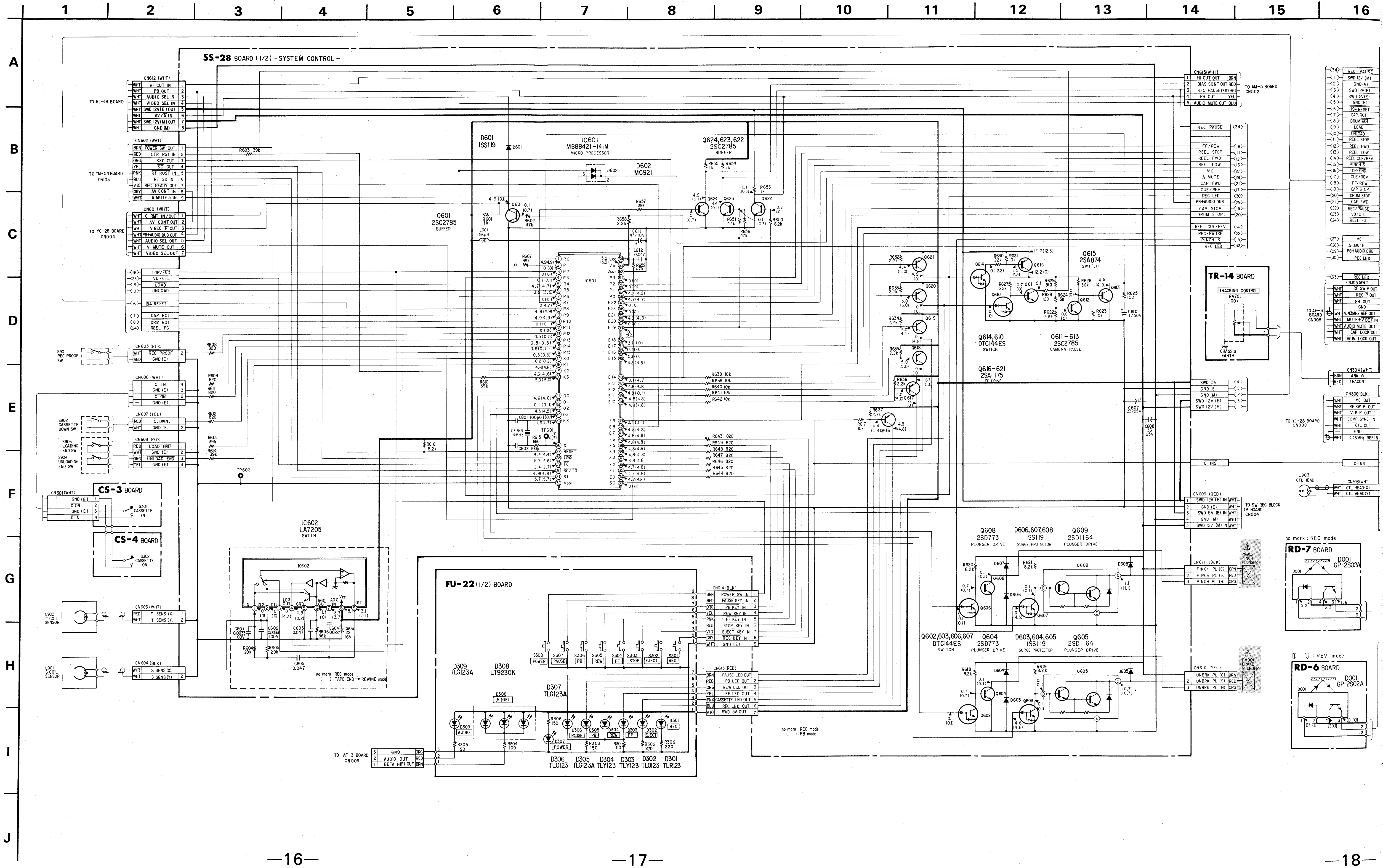
no mark : PAL REC mode
( ): PAL PB mode
⟨ ⟩: SECAM REC mode
[ ]: SECAM PB mode
✱: Can not be measured

When indicating parts by reference number, please include the board name.

SERVO/SYSTEM CONTROL

SS-28 (SERVO/SYSTEM CONTROL), FU-22 (FUNCTION SWITCH & IND), TR-14 (TRACKING CONTROL), RD-6 (ROTATION DETECTOR), RD-7 (ROTATION DETECTOR), LM-8 (NOISE FILTER), CS-3 (CASSETTE ON SWITCH), CS-4 (CASSETTE I

– Ref. No. SS-28 BOARD : 4000 series, FU-22 BOARD : 7000 series, TR-14 BOARD : 5000 series, RD-6 BOARD : 6700 series, RD-7 BOARD : 6800 series, LM-8 BOARD : 7000 series, CS-3, CS-4 BOARD : 6000 series, PT-7 BOARD : 7700 series, REEL MOTOR BOARD : 7500 series –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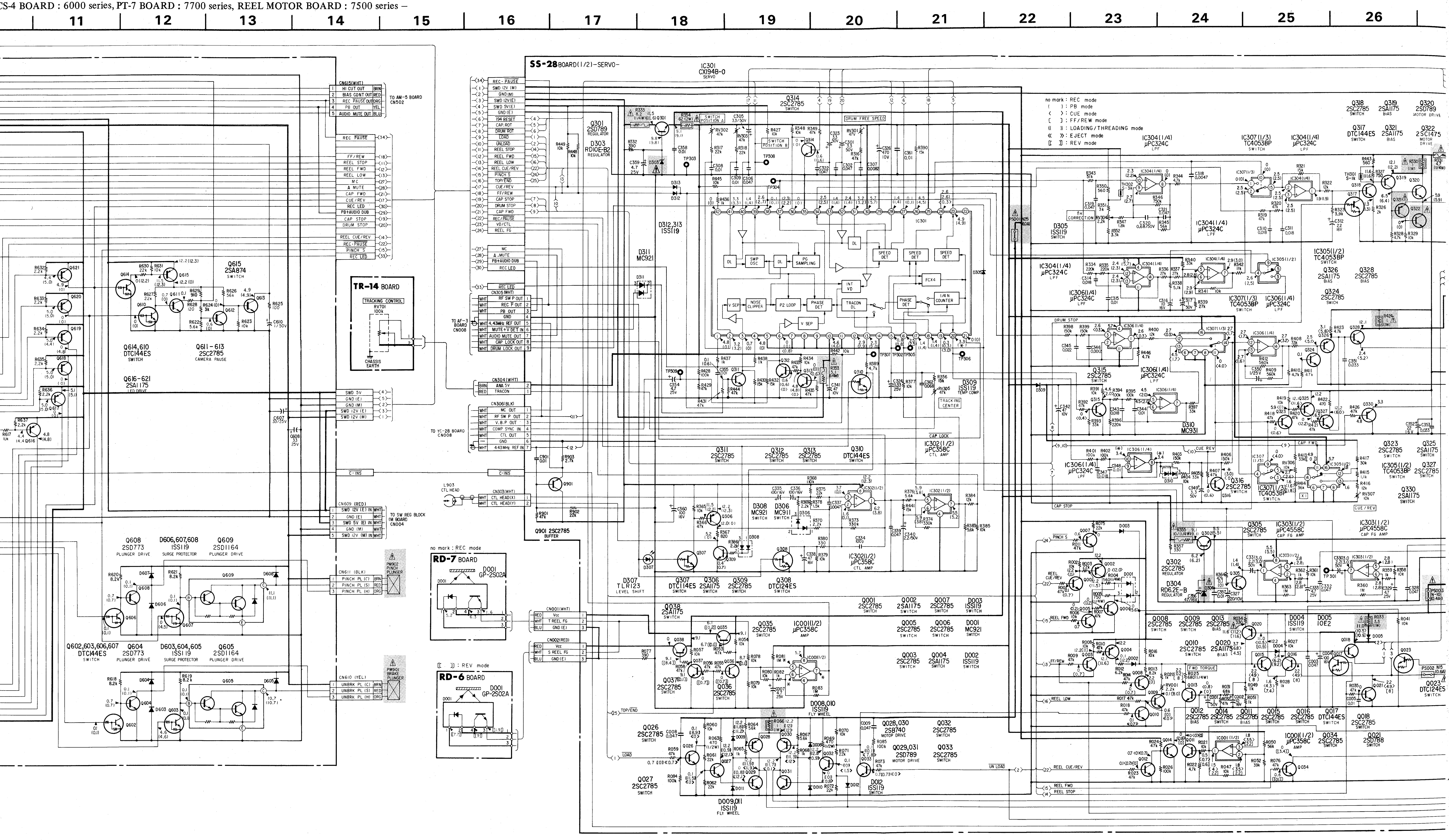
SS-28 BOARD (1/2) - SYSTEM CONTROL -
CN612 (WHT)
TO RL-18 BOARD
CN602 (WHT)
TO TM-54 BOARD CN103
CN601 (WHT)
TO YC-28 BOARD CN004
D601 1SS119
IC601 MB88421-141M MICRO PROCESSOR
D602 MC921
Q624,623,622 2SC2785 BUFFER
Q601 2SC2785 BUFFER
S901 REC PROOF SW
CN605 (BLK)
CN606 (WHT)
S902 CASSETTE DOWN SW
CN607 (YEL)
S903 LOADING END SW
S904 UNLOADING END SW
CN608 (RED)
TP602
CN301 (WHT)
CS-3 BOARD
S301 CASSETTE IN
CS-4 BOARD
S302 CASSETTE ON
IC602 LA7205 SWITCH
L902 T COIL SENSOR
CN603 (WHT)
L901 S COIL SENSOR
CN604 (BLK)
no mark : REC mode
( ) : TAPE END → REWIND mode
FU-22 (1/2) BOARD
CN614 (BLK)
CN613 (RED)
S308 POWER
S307 PAUSE
S306 PB
S305 REW
S304 FF
S303 STOP
S302 EJECT
S301 REC
D309 TLG123A
D308 LT9230N
D307 TLG123A
D306 TLO123
D305 TLG123A
D304 TLY123
D303 TLY123
D302 TLO123
D301 TLR123
TO AF-3 BOARD CN009
Q615 2SA874 SWITCH
Q614,610 DTC144ES SWITCH
Q611-613 2SC2785 CAMERA PAUSE
Q616-621 2SA1175 LED DRIVE
CN615 (WHT)
TO AM-5 BOARD CN502
TR-14 BOARD
TRACKING CONTROL
RV701 100k
CHASSIS EARTH
TO AF-3 BOARD CN008
CN304 (WHT)
CN306 (BLK)
TO YC-28 BOARD CN008
L903 CTL HEAD
CN303 (WHT)
CN609 (RED)
TO SW REG BLOCK IM BOARD CN004
Q608 2SD773 PLUNGER DRIVE
D606,607,608 1SS119 SURGE PROTECTOR
Q609 2SD1164 PLUNGER DRIVE
Q602,603,606,607 DTC144ES SWITCH
Q604 2SD773 PLUNGER DRIVE
D603,604,605 1SS119 SURGE PROTECTOR
Q605 2SD1164 PLUNGER DRIVE
CN611 (BLK)
PM902 PINCH PLUNGER
CN610 (YEL)
PM901 BRAKE PLUNGER
no mark : REC mode
( ) : PB mode
no mark : REC mode
RD-7 BOARD
D001 GP-2S02A
[ ] : REV mode
RD-6 BOARD
D001 GP-2S02A

TION DETECTOR), LM-8 (NOISE FILTER), CS-3 (CASSETTE ON SWITCH), CS-4 (CASSETTE IN SWITCH), PT-7 (REEL & CAPSTAN MOTOR DRIVE), CAPSTAN MOTOR, REEL MOTOR SCHEMATIC DIAGRAM

CS-4 BOARD : 6000 series, PT-7 BOARD : 7700 series, REEL MOTOR BOARD : 7500 series –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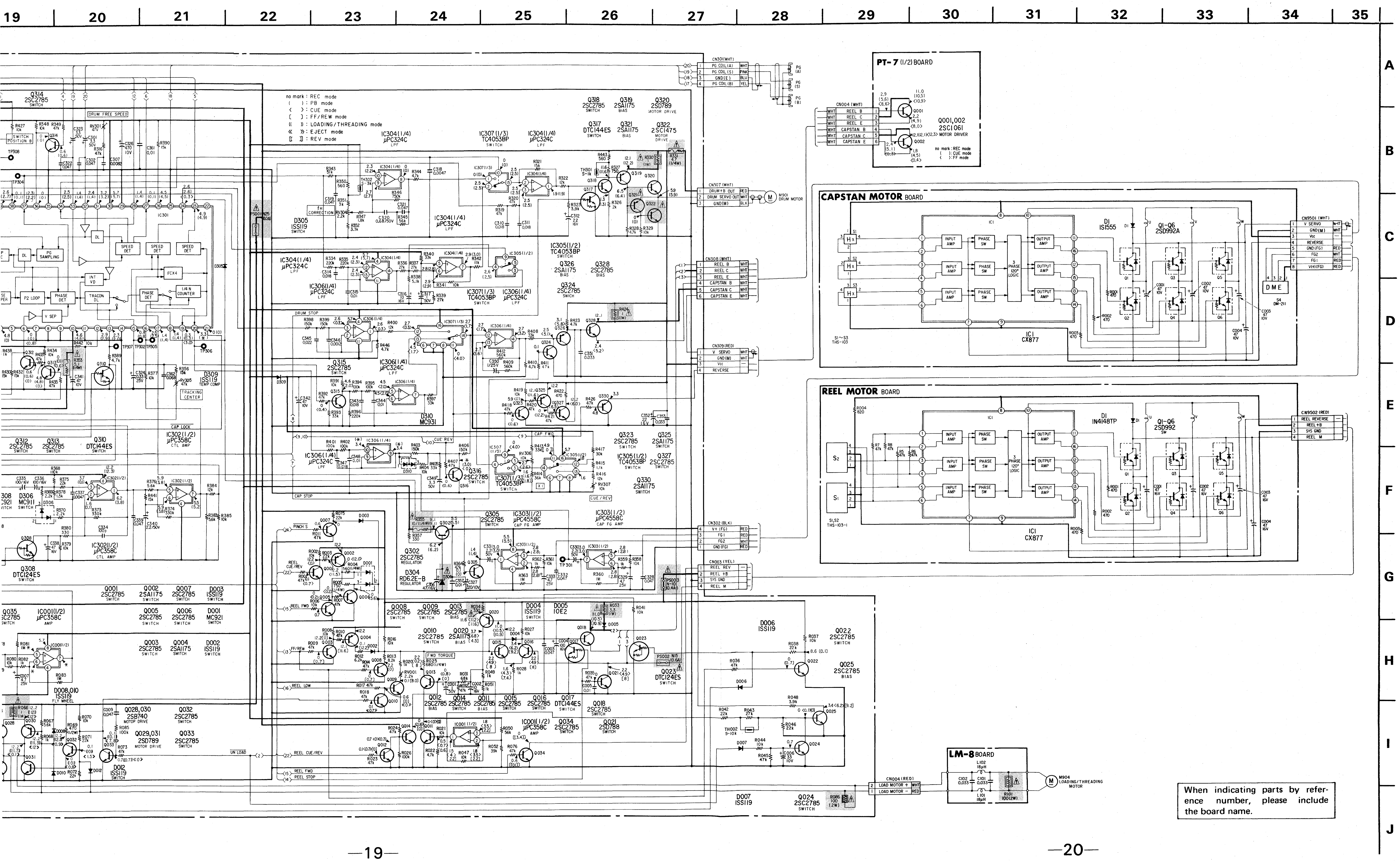
SS-28 BOARD (1/2) -SERVO-
IC301 CX194B-0 SERVO
TR-14 BOARD
TRACKING CONTROL RV701 100k
CHASSIS EARTH
RD-7 BOARD
D001 GP-2S02A
RD-6 BOARD
D001 GP-2S02A
no mark : REC mode
[ ] : REV mode
no mark : REC mode
( ) : PB mode
< > : CUE mode
[ ] : FF/REW mode
(( )) : LOADING/THREADING mode
<< >> : EJECT mode
[[ ]] : REV mode
CN615 (WHT)
TO AM-5 BOARD CN502
TO AF-3 BOARD CN008
TO YC-28 BOARD CN008
TO SW REG BLOCK IM BOARD CN004
L903 CTL HEAD
Q615 2SA874 SWITCH
Q614,610 DTC144ES SWITCH
Q611-613 2SC2785 CAMERA PAUSE
Q616-621 2SA1175 LED DRIVE
Q608 2SD773 PLUNGER DRIVE
D606,607,608 1SS119 SURGE PROTECTOR
Q609 2SD1164 PLUNGER DRIVE
Q602,603,606,607 DTC144ES SWITCH
Q604 2SD773 PLUNGER DRIVE
D603,604,605 1SS119 SURGE PROTECTOR
Q605 2SD1164 PLUNGER DRIVE
PM902 PINCH PLUNGER
PM901 BRAKE PLUNGER
Q301 2SD789 REGULATOR
D303 RD10E-B2 REGULATOR
Q314 2SC2785 SWITCH
D312,313 1SS119
D311 MC921
Q901 2SC2785 BUFFER
D307 TLR123 LEVEL SHIFT
Q307 DTC114ES SWITCH
Q306 2SA1175 SWITCH
Q309 2SC2785 SWITCH
Q308 DTC124ES SWITCH
Q311 2SC2785 SWITCH
Q312 2SC2785 SWITCH
Q313 2SC2785 SWITCH
Q310 DTC144ES SWITCH
IC302(1/2) µPC358C CTL AMP
D308 MC921 SWITCH
D306 MC911 SWITCH
D309 1SS119 TEMP COMP
TRACKING CENTER
D305 1SS119 SWITCH
IC304(1/4) µPC324C LPF
IC307(1/3) TC4053BP SWITCH
IC305(1/2) TC4053BP SWITCH
IC306(1/4) µPC324C LPF
Q315 2SC2785 SWITCH
D310 MC931
Q316 2SC2785 SWITCH
IC303(1/2) µPC4558C CAP FG AMP
Q305 2SC2785 SWITCH
Q302 2SC2785 REGULATOR
D304 RD6.2E-B REGULATOR
Q318 2SC2785 SWITCH
Q319 2SA1175 BIAS
Q320 2SD789 MOTOR DRIVE
Q317 DTC144ES SWITCH
Q321 2SA1175 BIAS
Q322 2SC1475 MOTOR DRIVE
Q326 2SA1175 BIAS
Q328 2SC2785 BIAS
Q324 2SC2785 SWITCH
Q323 2SC2785 SWITCH
Q325 2SA1175 SWITCH
Q327 2SC2785 SWITCH
Q330 2SA1175 SWITCH
Q038 2SA1175
Q035 2SC2785 SWITCH
IC001(1/2) µPC358C AMP
Q037 2SC2785 SWITCH
Q036 2SC2785 SWITCH
Q026 2SC2785 SWITCH
Q027 2SC2785 SWITCH
D008,010 1SS119 FLY WHEEL
D009,011 1SS119 FLY WHEEL
Q028,030 2SB740 MOTOR DRIVE
Q029,031 2SD789 MOTOR DRIVE
Q032 2SC2785 SWITCH
Q033 2SC2785 SWITCH
D012 1SS119 SWITCH
Q001 2SC2785 SWITCH
Q002 2SA1175 SWITCH
Q007 2SC2785 SWITCH
D003 1SS119 SWITCH
Q005 2SC2785 SWITCH
Q006 2SC2785 SWITCH
D001 MC921 SWITCH
Q003 2SC2785 SWITCH
Q004 2SA1175 SWITCH
D002 1SS119 SWITCH
Q008 2SC2785 SWITCH
Q009 2SC2785 SWITCH
Q013 2SC2785 BIAS
D004 1SS119 SWITCH
D005 IOE2
Q010 2SC2785 SWITCH
Q020 2SC2785 BIAS
Q012 2SC2785 BIAS
Q014 2SC2785 SWITCH
Q011 2SC2785 BIAS
Q015 2SC2785 SWITCH
Q016 2SC2785 SWITCH
Q017 DTC144ES SWITCH
Q018 2SC2785 SWITCH
Q034 2SC2785 SWITCH
Q021 2SD788 SWITCH
Q023 DTC124ES SWITCH
FWD TORQUE
PS002 N5 (0.6A)

TOR DRIVE), CAPSTAN MOTOR, REEL MOTOR SCHEMATIC DIAGRAM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J
PT-7 (1/2) BOARD
Q001,002
2SC1061
MOTOR DRIVER
CAPSTAN MOTOR BOARD
REEL MOTOR BOARD
LM-8 BOARD
M901 DRUM MOTOR
M904 LOADING/THREADING MOTOR
DME
IC1 CX877
INPUT AMP
PHASE SW
3 PHASE 120° LOGIC
OUTPUT AMP
Q1-Q6 2SD992A
Q1-Q6 2SD992
D1 IS1555
D1 IN4148TP
CN301 (WHT)
CN307 (WHT)
CN308 (WHT)
CN309 (RED)
CN302 (BLK)
CN003 (YEL)
CN004 (RED)
CN9501 (WHT)
CN9502 (RED)
no mark : REC mode
( ) : PB mode
< > : CUE mode
[ ] : FF/REW mode
(( )) : LOADING/THREADING mode
« » : EJECT mode
〚 〛 : REV mode
IC304 (1/4) μPC324C
IC305 (1/2) TC4053BP
IC306 (1/4) μPC324C
IC307 (1/3) TC4053BP
IC303 (1/2) μPC4558C
IC302 (1/2) μPC358C
IC001 (1/2) μPC358C
IC301
DRUM FREE SPEED
PG SAMPLING
SPEED DET
FCX4
INT VD
TRACON DL
PHASE DET
1/4 N COUNTER
P2 LOOP
V SEP
TRACKING CENTER
DRUM STOP
CAP LOCK
CAP STOP
CAP FWD
CUE REV
CUE/REV
FWD TORQUE
PINCH S
REEL CUE/REV
REEL FWD
FF/REW
REEL LOW
REEL STOP
UN LOAD
TP301
TP306
TP307
TP302
TP305
TP308
TP304

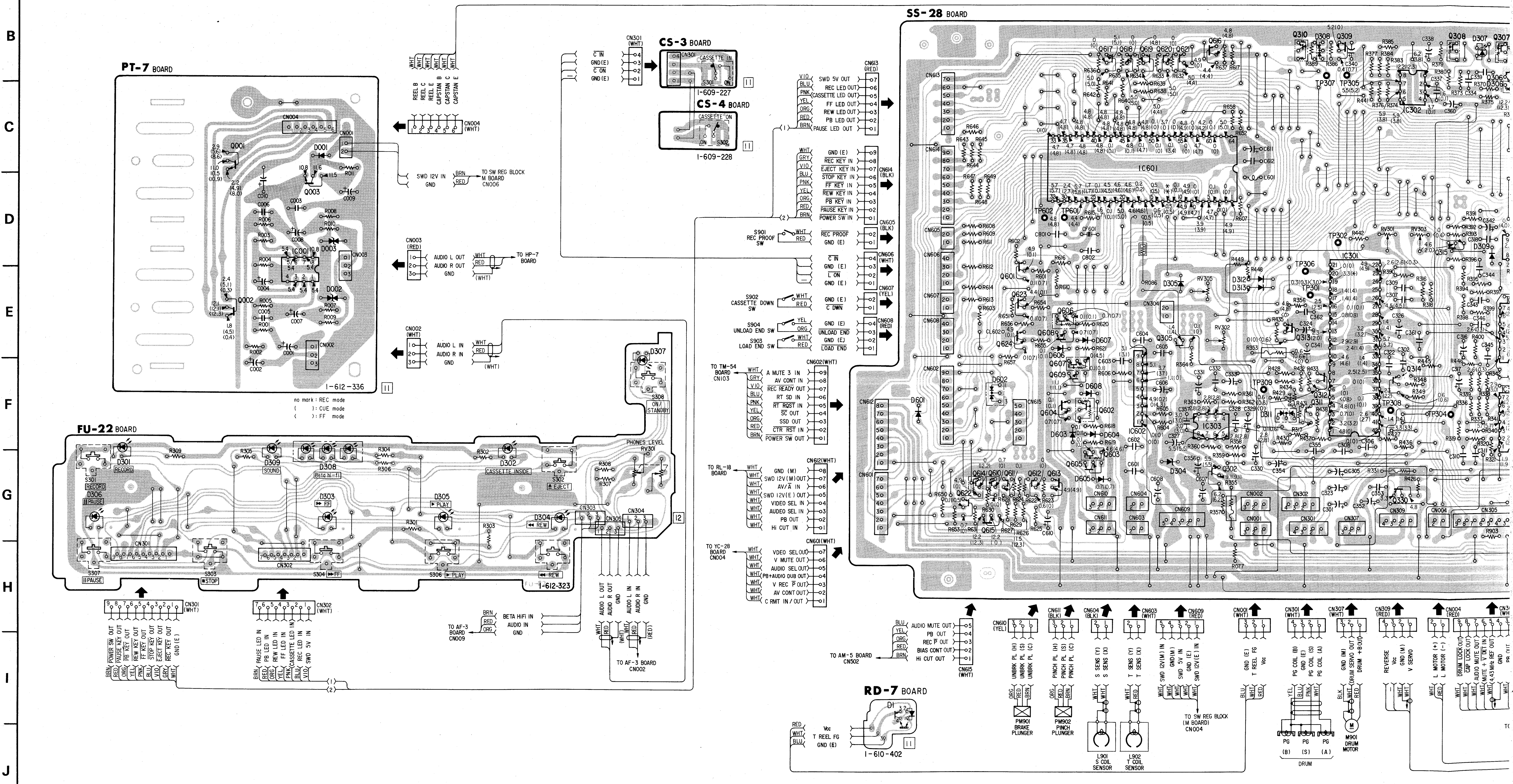
When indicating parts by reference number, please include the board name.

SERVO/SYSTEM CONTROL SERVO/SYSTEM CONTROL

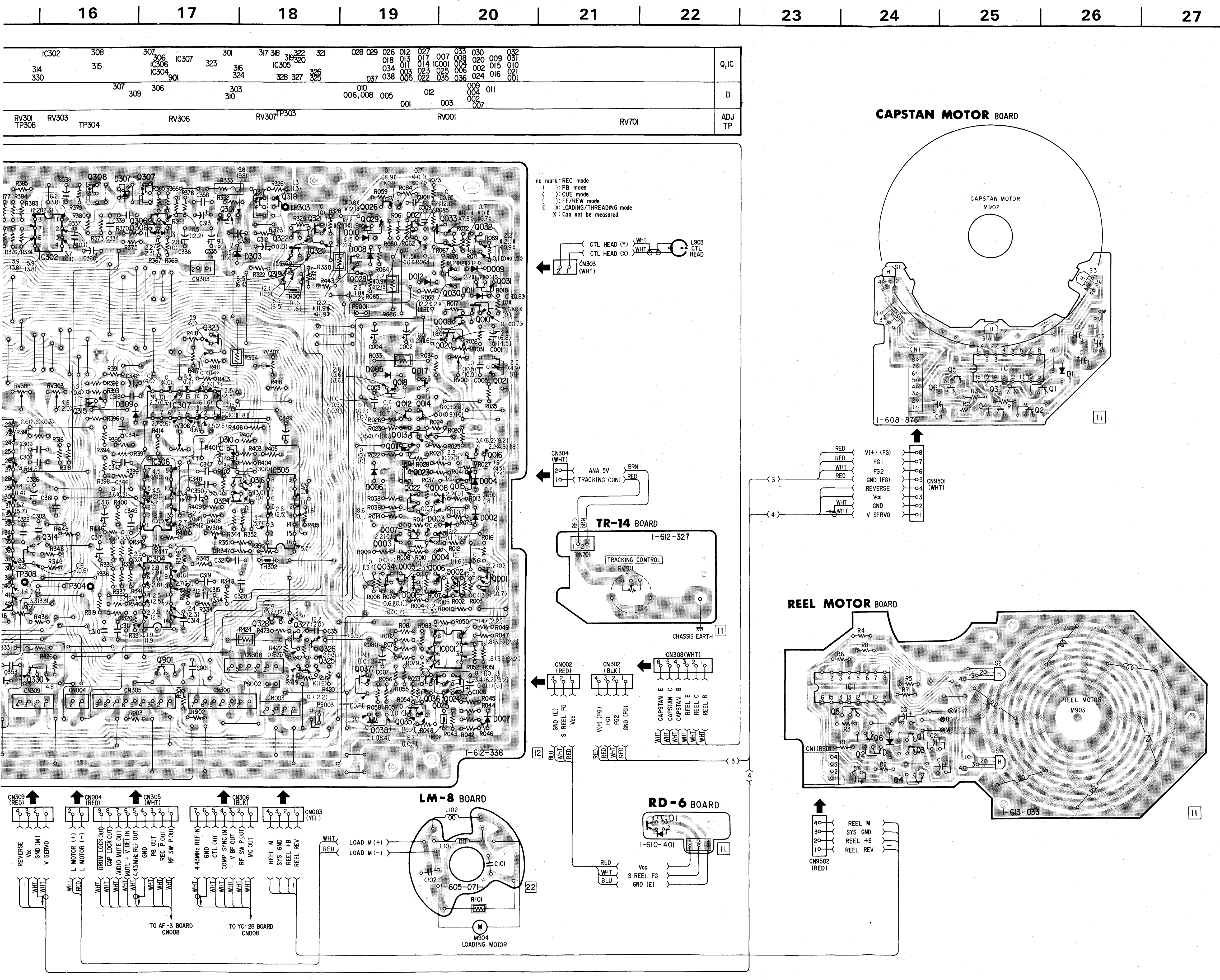
SS-28 (SERVO/SYSTEM CONTROL), FU-22 (FUNCTION SWITCH & IND), TR-14 (TRACKING CONTROL), RD-6 (ROTATION DETECTOR), RD-7 (ROTATION DETECTOR), LM-8 (NOISE FILTER), CS-3 (CASSETTE ON SWITCH), CS-4 (CASSETTE IN SWI

– Ref. No. SS-28 BOARD : 4000 series, FU-22 BOARD : 7000 series, TR-14 BOARD : 5000 series, RD-6 BOARD : 6700 series, RD-7 BOARD : 6800 series, LM-8 BOARD : 7000 series, CS-3, CS-4 BOARD : 6000 series, PT-7 BOARD : 7700 series, REEL MOTOR BOARD : 7500 series –

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Q, IC			001 002	003 IC001							601 623 624 622 614 615 610 611	606 608 607 609 602 603 605 612 613 604	617 618 619 IC601 620 621 IC602 305 IC303 302	616 313 310 311	312 309 IC301 314 330	IC302 308 315
D	306	301	309	001 308 303 003 002	305	302 304	307			601	602	606 607 608 604 605 603	304 305	312 313 311	308	307 309
ADJ TP							RV301					TP602 TP601	RV305 RV302	TP309 TP306 TP301	TP307 TP305 TP302 RV301 TP308	RV303 TP304


PT-7 BOARD
1-612-336
CN004 (WHT)
CN003 (RED)
CN002 (WHT)
SWD 12V IN
GND
TO SW REG BLOCK M BOARD CN006
AUDIO L OUT
AUDIO R OUT
TO HP-7 BOARD
AUDIO L IN
AUDIO R IN
REEL B
REEL C
REEL E
CAPSTAN B
CAPSTAN C
CAPSTAN E
no mark : REC mode
( ) : CUE mode
< > : FF mode
CS-3 BOARD
1-609-227
CS-4 BOARD
1-609-228
CN301 (WHT)
C IN
GND (E)
C ON
CASSETTE IN
CASSETTE ON
S301
S302
FU-22 BOARD
1-612-323
S301 RECORD
S302 EJECT
S303 STOP
S304 FF
S305 REW
S306 PLAY
S307 PAUSE
S308 ON/STANDBY
D301 RECORD
D302 CASSETTE INSIDE
D303 FF
D304 REW
D305 PLAY
D306 PAUSE
D307
D308 Beta hi-fi
D309 SOUND
PHONES LEVEL RV301
CN301 (WHT)
CN302 (WHT)
CN303
CN304
CN305
POWER SW OUT
PAUSE KEY OUT
PB KEY OUT
REW KEY OUT
FF KEY OUT
STOP KEY OUT
EJECT KEY OUT
REC KEY OUT
GND (E)
PAUSE LED IN
PB LED IN
REW LED IN
FF LED IN
CASSETTE LED IN
REC LED IN
SWD 5V IN
TO AF-3 BOARD CN009
BETA HiFi IN
AUDIO IN
GND
TO AF-3 BOARD CN002
S901 REC PROOF SW
S902 CASSETTE DOWN SW
S904 UNLOAD END SW
S903 LOAD END SW
TO TM-54 BOARD CN103
TO RL-18 BOARD
TO YC-28 BOARD CN004
TO AM-5 BOARD CN502
SS-28 BOARD
CN613 (RED)
CN614 (BLK)
CN605 (BLK)
CN606 (WHT)
CN607 (YEL)
CN608 (RED)
CN602 (WHT)
CN612 (WHT)
CN601 (WHT)
CN615 (WHT)
IC601
IC602
IC301
IC302
IC303
RV302
RV303
RV305
TP301
TP302
TP304
TP305
TP306
TP307
TP308
TP309
TP601
TP602
RD-7 BOARD
1-610-402
Vcc
T REEL FG
GND (E)
PM901 BRAKE PLUNGER
PM902 PINCH PLUNGER
L901 S COIL SENSOR
L902 T COIL SENSOR
TO SW REG BLOCK (M BOARD) CN004
PG (B)
PG (S)
PG (A)
DRUM
M901 DRUM MOTOR
CN610 (YEL)
CN611 (BLK)
CN604 (BLK)
CN603 (WHT)
CN609 (RED)
CN001 (WHT)
CN301 (WHT)
CN307 (WHT)
CN309 (RED)
CN004 (RED)

S-4 (CASSETTE IN SWITCH), PT-7 (REEL & CAPSTAN MOTOR DRIVE), CAPSTAN MOTOR, REEL MOTOR PRINTED WIRING BOARDS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Q,IC
D
ADJ TP
RV301
TP308
RV303
TP304
RV306
RV307
TP303
RV001
RV701
no mark : REC mode
( ) : PB mode
⟨ ⟩ : CUE mode
[ ] : FF/REW mode
⟪ ⟫ : LOADING/THREADING mode
✱ : Can not be measured
CTL HEAD (Y)
CTL HEAD (X)
WHT
L903
CTL HEAD
CN303 (WHT)
CN304 (WHT)
ANA 5V
TRACKING CONT
BRN
RED
TR-14 BOARD
1-612-327
CN701
TRACKING CONTROL
RV701
CHASSIS EARTH
CN002 (RED)
CN302 (BLK)
CN308 (WHT)
GND (E)
S REEL FG
Vcc
V(+) (FG)
FG1
FG2
GND (FG)
CAPSTAN E
CAPSTAN C
CAPSTAN B
REEL E
REEL C
REEL B
1-612-338
CN309 (RED)
CN004 (RED)
CN305 (WHT)
CN306 (BLK)
CN003 (YEL)
REVERSE
Vcc
GND (M)
V SERVO
L MOTOR (+)
L MOTOR (−)
DRUM LOCK OUT
CAP LOCK OUT
AUDIO MUTE OUT
MUTE + V DET IN
4.43MHz REF OUT
GND
PB OUT
REC P OUT
RF SW P OUT
4.43MHz REF IN
GND
CTL OUT
COMP SYNC IN
V BP OUT
RF SW P OUT
MC OUT
REEL M
SYS GND
REEL +B
REEL REV
TO AF-3 BOARD CN008
TO YC-28 BOARD CN008
LM-8 BOARD
LOAD M (+)
LOAD M (−)
L101
L102
C101
C102
R101
1-605-071
M904
LOADING MOTOR
RD-6 BOARD
D1
1-610-401
S REEL FG
GND (E)
BLU
CAPSTAN MOTOR BOARD
CAPSTAN MOTOR
M902
1-608-876
CN1
IC1
V(+) (FG)
FG1
FG2
GND (FG)
REVERSE
Vcc
GND
V SERVO
CN9501 (WHT)
REEL MOTOR BOARD
REEL MOTOR
M903
1-613-033
CN1 (RED)
REEL M
SYS GND
REEL +B
REEL REV
CN9502 (RED)
A
B
C
D
E
F
G
H
I
J

Note:

- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ▭ : Fusible resistor
- ― : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

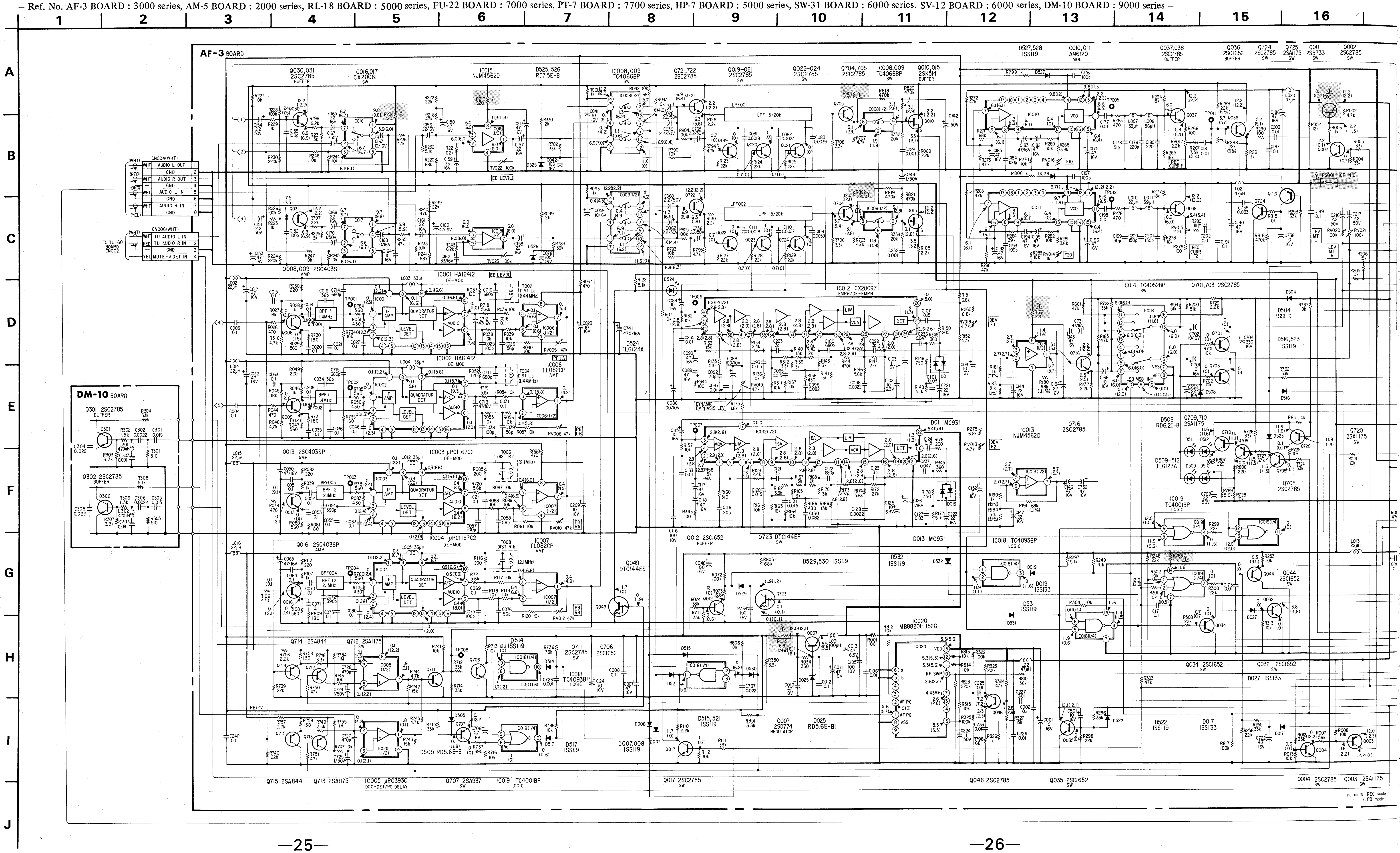
Note:

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : component side
- ▨ : B+ pattern

AUDIO AUDIO

AF-3 (AFM SIGNAL RECORD/PLAYBACK PROCESS), AM-5 (AUDIO SIGNAL REC/PB PROCESS), RL-18 (LEVEL METER DRIVE), FU-22 (HEADPHONE LEVEL), PT-7 (HEADPHONE AMP), HP-7 (HEADPHONE JACK), SW-31 (FUNCTION SWITCH), SV-12 (A

– Ref. No. AF-3 BOARD : 3000 series, AM-5 BOARD : 2000 series, RL-18 BOARD : 5000 series, FU-22 BOARD : 7000 series, PT-7 BOARD : 7700 series, HP-7 BOARD : 5000 series, SW-31 BOARD : 6000 series, SV-12 BOARD : 6000 series, DM-10 BOARD : 9000 series –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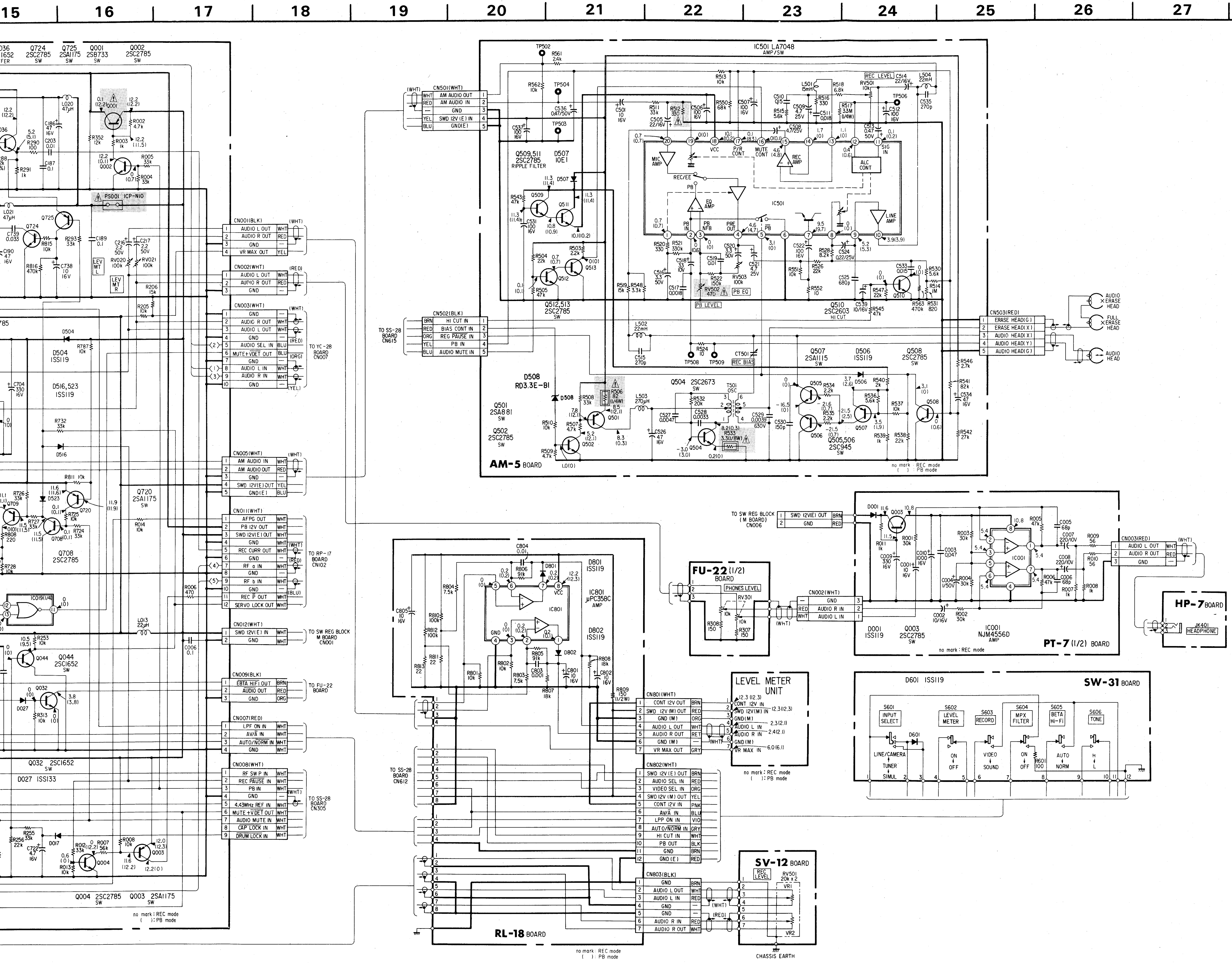
J
AF-3 BOARD
DM-10 BOARD
CN004(WHT)
AUDIO L OUT
AUDIO R OUT
AUDIO L IN
AUDIO R IN
GND
CN006(WHT)
TU AUDIO L IN
TU AUDIO R IN
MUTE +V DET IN
TO TU-60 BOARD CN002
Q030,031 2SC2785 BUFFER
IC016,017 CX20061 SW
IC015 NJM4562D
D525,526 RD7.5E-B
IC008,009 TC4066BP SW
Q721,722 2SC2785
Q019–021 2SC2785 SW
Q022–024 2SC2785 SW
Q704,705 2SC2785
Q010,015 2SK514 BUFFER
D527,528 ISS119
IC010,011 AN6120 MOD
Q037,038 2SC2785 BUFFER
Q036 2SC1652 BUFFER
Q724 2SC2785 SW
Q725 2SA1175 SW
Q001 2SB733 SW
Q002 2SC2785 SW
LPF001
LPF 15/20k
LPF002
VCO
EE LEVEL
Q008,009 2SC403SP AMP
IC001 HA12412 DE-MOD
IC002 HA12412 DE-MOD
IC006 TL082CP
BPF f1 1.44MHz
QUADRATUR DET
IF AMP
LEVEL DET
AFC
AUDIO
T002 DIST La (1.44MHz)
T004 DIST Lb (1.44MHz)
PB LA
PB LB
IC012 CX20097 EMPH/DE-EMPH
DYNAMIC EMPHASIS LEV
D011 MC931
IC013 NJM4562D
Q716 2SC2785
IC014 TC4052BP SW
Q701,703 2SC2785
D504 ISS119
D516,523 ISS119
D508 RD6.2E-B
Q709,710 2SA1175
D509–512 TLG123A
Q708 2SC2785
Q720 2SA1175 SW
D524 TLG123A
Q301 2SC2785 BUFFER
Q302 2SC2785 BUFFER
Q013 2SC403SP AMP
IC003 μPC1167C2 DE-MOD
IC004 μPC1167C2 DE-MOD
IC007 TL082CP AMP
T006 DIST Ra (2.1MHz)
T008 DIST Rb (2.1MHz)
PB RA
PB RB
Q016 2SC403SP AMP
Q012 2SC1652 BUFFER
Q723 DTC144EF SW
D013 MC931
IC018 TC4093BP LOGIC
IC019 TC4001BP LOGIC
Q049 DTC144ES
D529,530 ISS119
D532 ISS119
D019 ISS133
D531 ISS119
IC020 MB88201-152G
Q044 2SC1652 SW
Q714 2SA844
Q712 2SA1175 SW
IC005
D514 ISS119
Q711 2SC2785 SW
Q706 2SC1652
IC018 TC4093BP LOGIC
D515,521 ISS119
Q007 2SD774 REGULATOR
D025 RD5.6E-B1
Q034 2SC1652 SW
Q032 2SC1652 SW
D027 ISS133
D505 RD5.6E-B
D517 ISS119
D007,008 ISS119
D522 ISS119
D017 ISS133
Q715 2SA844
Q713 2SA1175
IC005 μPC393C DOC-DET/PG DELAY
Q707 2SA937 SW
IC019 TC4001BP LOGIC
Q017 2SC2785 SW
Q046 2SC2785
Q035 2SC1652
Q004 2SC2785 SW
Q003 2SA1175 SW
PS001 ICP-N10
no mark : REC mode
( ) : PB mode

FUNCTION SWITCH), SV-12 (AUDIO LEVEL), DM-10 (AFM PROCESS), LEVEL METER UNIT SCHEMATIC DIAGRAM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I
J
Q724 2SC2785 SW
Q725 2SA1175 SW
Q001 2SB733 SW
Q002 2SC2785 SW
PS001 ICP-N10
CN001(BLK)
AUDIO L OUT
AUDIO R OUT
GND
VR MAX OUT
CN002(WHT)
CN003(WHT)
AUDIO SEL IN
MUTE+VDET OUT
AUDIO L IN
AUDIO R IN
TO YC-28 BOARD CN007
D504 1SS119
D516,523 1SS119
CN005(WHT)
AM AUDIO IN
AM AUDIO OUT
SWD 12V(E) OUT
GND(E)
Q720 2SA1175 SW
Q708 2SC2785
CN011(WHT)
AFPG OUT
PB 12V OUT
SWD 12V(E) OUT
REC CURR OUT
RF a IN
RF b IN
REC P OUT
SERVO LOCK OUT
TO RP-17 BOARD CN102
CN012(WHT)
TO SW REG BLOCK M BOARD CN001
Q044 2SC1652 SW
CN009(BLK)
EBTA HiFi OUT
AUDIO OUT
TO FU-22 BOARD
CN007(RED)
LPF ON IN
AV/A IN
AUTO/NORM IN
Q032 2SC1652 SW
D027 1SS133
CN008(WHT)
RF SW P IN
REC PAUSE IN
PB IN
4.43MHz REF IN
MUTE+VDET OUT
AUDIO MUTE IN
CAP LOCK IN
DRUM LOCK IN
TO SS-28 BOARD CN305
Q004 2SC2785 SW
Q003 2SA1175 SW
no mark : REC mode
( ) : PB mode
IC501 LA7048 AMP/SW
CN501(WHT)
AM AUDIO OUT
AM AUDIO IN
SWD 12V(E) IN
GND(E)
TP502
TP504
TP503
Q509,511 2SC2785 RIPPLE FILTER
D507 10E1
MIC AMP
REC/EE
PB
EQ AMP
P/R CONT
MUTE CONT
REC AMP
ALC CONT
SIG IN
LINE AMP
REC LEVEL
RV501
PB LEVEL
RV502
PB EQ
Q512,513 2SC2785 SW
Q510 2SC2603 HI CUT
CN502(BLK)
TO SS-28 BOARD CN615
HI CUT IN
BIAS CONT IN
REC PAUSE IN
PB IN
AUDIO MUTE IN
TP508
TP509
REC BIAS
CT501
Q507 2SA1115 SW
D506 1SS119
Q508 2SC2785 SW
CN503(RED)
ERASE HEAD(G)
ERASE HEAD(X)
AUDIO HEAD(X)
AUDIO HEAD(Y)
AUDIO HEAD(G)
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO HEAD
D508 RD3.3E-B1
Q501 2SA881 SW
Q502 2SC2785 SW
Q504 2SC2673 SW
T501 OSC
Q505,506 2SC945 SW
AM-5 BOARD
TO SW REG BLOCK (M BOARD) CN006
SWD 12V(E) OUT
GND
D001 1SS119
Q003 2SC2785 SW
IC001 NJM4556D AMP
CN003(RED)
AUDIO L OUT
AUDIO R OUT
PT-7 (1/2) BOARD
HP-7 BOARD
JK401 HEADPHONE
FU-22 (1/2) BOARD
PHONES LEVEL
RV301
CN002(WHT)
C804
IC801 μPC358C AMP
D801 1SS119
D802 1SS119
TO SS-28 BOARD CN612
RL-18 BOARD
CN801(WHT)
CONT 12V OUT
SWD 12V(M) OUT
GND(M)
AUDIO L OUT
AUDIO R OUT
VR MAX OUT
LEVEL METER UNIT
CN802(WHT)
SWD 12V(E) OUT
AUDIO SEL IN
VIDEO SEL IN
SWD 12V(M) OUT
CONT 12V IN
AV/A IN
LPP ON IN
AUTO/NORM IN
HI CUT IN
PB OUT
GND(E)
CN803(BLK)
SV-12 BOARD
REC LEVEL
RV501 20k x 2
CHASSIS EARTH
D601 1SS119
SW-31 BOARD
S601 INPUT SELECT
S602 LEVEL METER
S603 RECORD
S604 MPX FILTER
S605 BETA Hi-Fi
S606 TONE
LINE/CAMERA
TUNER
SIMUL
ON
OFF
VIDEO
SOUND
AUTO
NORM
H
L

Note:
- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ∿ : Fusible resistor
- —— : B + bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

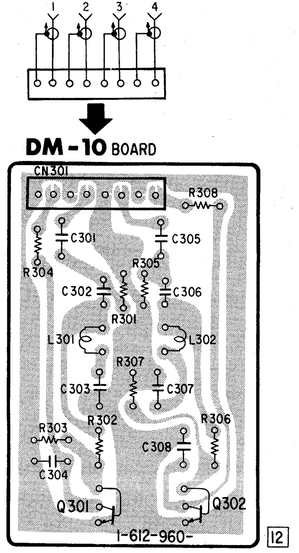
When indicating parts by reference number, please include the board name.

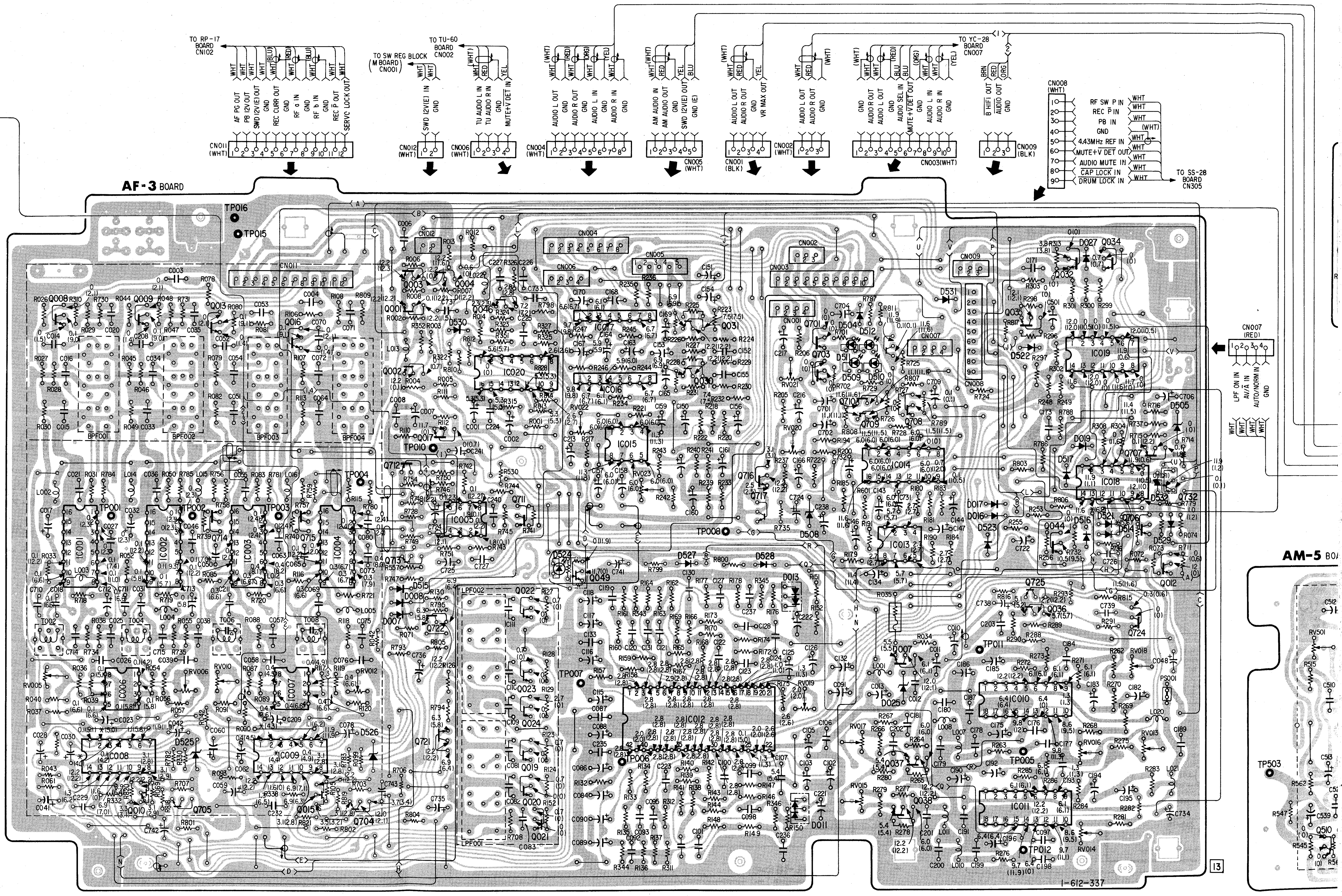
AUDIO AUDIO

AF-3 (AFM SIGNAL RECORD/PLAYBACK PROCESS), AM-5 (AUDIO SIGNAL REC/PB PROCESS), RL-18 (LEVEL METER DRIVE), FU-22 (HEADPHONE LEVEL), PT-7 (HEADPHONE AMP), HP-7 (HEADPHONE JACK), SW-31 (FUNCTION SWITCH), SV-12 (

– Ref. No. AF-3 BOARD : 3000 series, AM-5 BOARD : 2000 series, RL-18 BOARD : 5000 series, FU-22 BOARD : 7000 series, PT-7 BOARD : 7700 series, HP-7 BOARD : 5000 series, SW-31 BOARD : 6000 series, SV-12 BOARD : 6000 series, DM-10 BOARD : 9000 series –

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Q , IC			301	302	008 IC001	009 IC002 IC006 IC008 010 705 013 714	IC003 016 715 IC007 IC009 015	IC004 704 003 001 002 712 713	004 017 722 721 IC005 046 IC020 711 022 023 024 019 020	021 049 IC017 IC016 IC015	031 030 IC012 716	701 703 710 709	720 IC014 IC013 007 038 708 037	035 725 036 IC010 IC011 044 032	034 IC019 IC018 724 707 706 723 012		510
D					RV005	525		526 515 008 007	530	524 527	528	013 011 508 504 511,512 509,510	025 531 523	017 522 517 027 019 516	521 514 532 505 529		
ADJ TP					TP001	TP002 RV006	TP016 TP015 RV010 TP003	TP004 RV102 TP010		RV022 TP007 RV023 TP006	TP008	RV021 RV020 RV019 RV017 RV015	TP011	TP005 TP012 RV016 RV014	RV018 RV013	TP503	RV501


DM-10 BOARD
CN301
R308
C301
C305
R304
R305
C302
C306
R301
L301
L302
R307
C303
C307
R302
R306
R303
C308
C304
Q301
Q302
1-612-960-
12


TO RP-17 BOARD CN102
WHT
WHT
WHT
WHT
WHT (BLU)
WHT (RED)
WHT (BLU)
WHT
WHT
AF PG OUT
PB 12V OUT
SWD 12V(E) OUT
GND
REC CURR OUT
GND
RF a IN
GND
RF b IN
GND
REC P̄ OUT
SERVC LOCK OUT
CN011 (WHT)
TO SW REG BLOCK (M BOARD CN001)
SWD 12V(E) IN
GND
CN012 (WHT)
TO TU-60 BOARD CN002
TU AUDIO L IN
TU AUDIO R IN
GND
MUTE+V̄ DET IN
CN006 (WHT)
AUDIO L OUT
GND
AUDIO R OUT
GND
AUDIO L IN
GND
AUDIO R IN
GND
CN004 (WHT)
AM AUDIO IN
AM AUDIO OUT
GND
SWD 12V(E) OUT
GND (E)
CN005 (WHT)
AUDIO L OUT
AUDIO R OUT
GND
VR MAX OUT
CN001 (BLK)
AUDIO L OUT
AUDIO R OUT
GND
CN002 (WHT)
TO YC-28 BOARD CN007
GND
AUDIO R OUT
AUDIO L OUT
GND
AUDIO SEL IN
MUTE+V̄ DET OUT
GND
AUDIO L IN
AUDIO R IN
GND
CN003 (WHT)
B̄ HIFI OUT
AUDIO OUT
GND
CN009 (BLK)
CN008 (WHT)
RF SW P IN
REC P̄ IN
PB IN
GND
4.43MHz REF IN
MUTE+V̄ DET OUT
AUDIO MUTE IN
CAP LOCK IN
DRUM LOCK IN
TO SS-28 BOARD CN305
AF-3 BOARD
TP016
TP015
CN007 (RED)
LPF ON IN
AV/Ā IN
AUTO/NORM IN
GND
BPF001
BPF002
BPF003
BPF004
LPF002
LPF001
1-612-337
13
AM-5 BO

no mack : REC mode
( ) : PB mode
✱ : Can not be measured

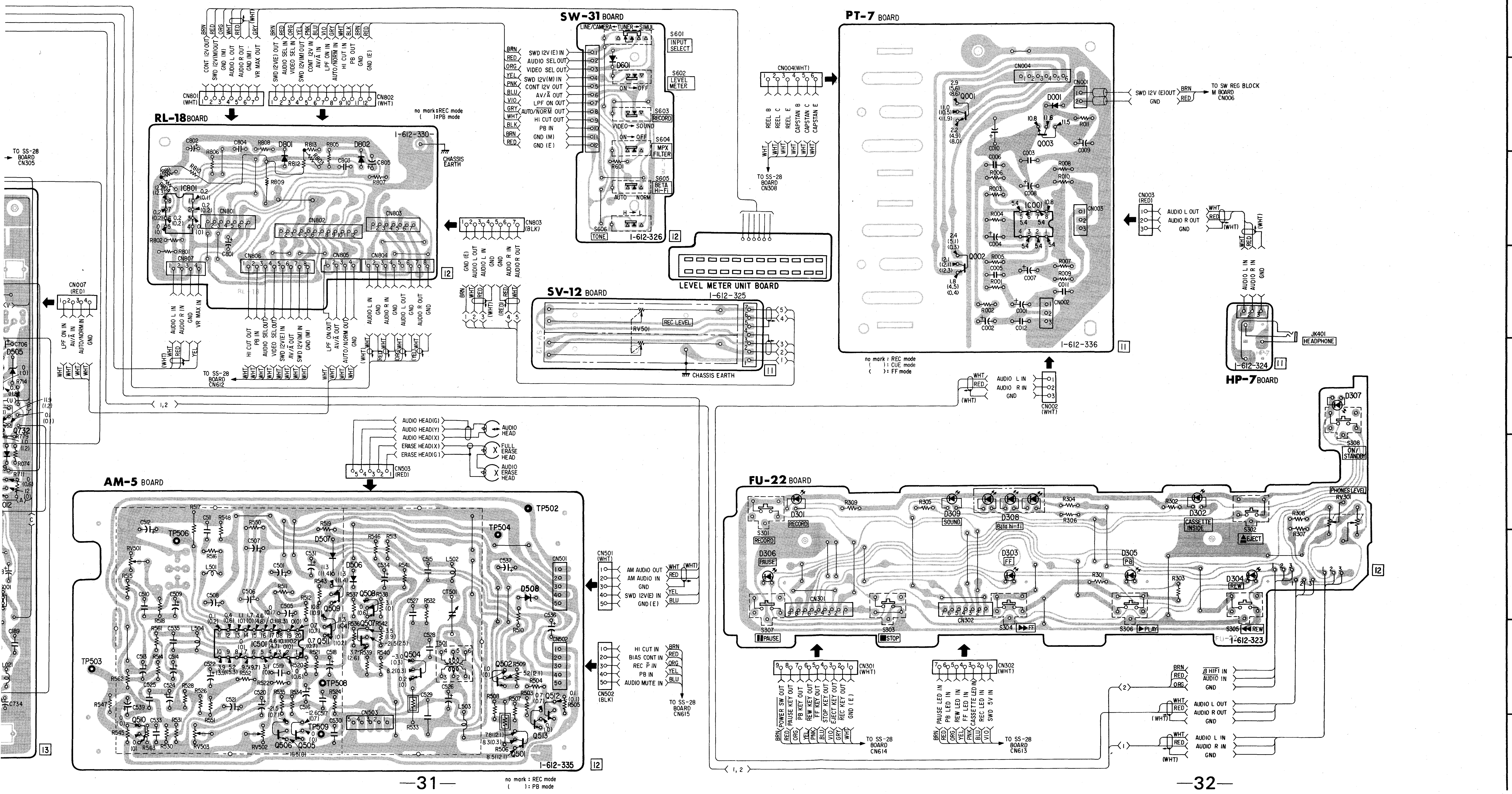
When indicating parts by reference number, please include the board name.

Note:

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern

:TION SWITCH), SV-12 (AUDIO LEVEL), DM-10 (AFM PROCESS), LEVEL METER UNIT PRINTED WIRING BOARDS

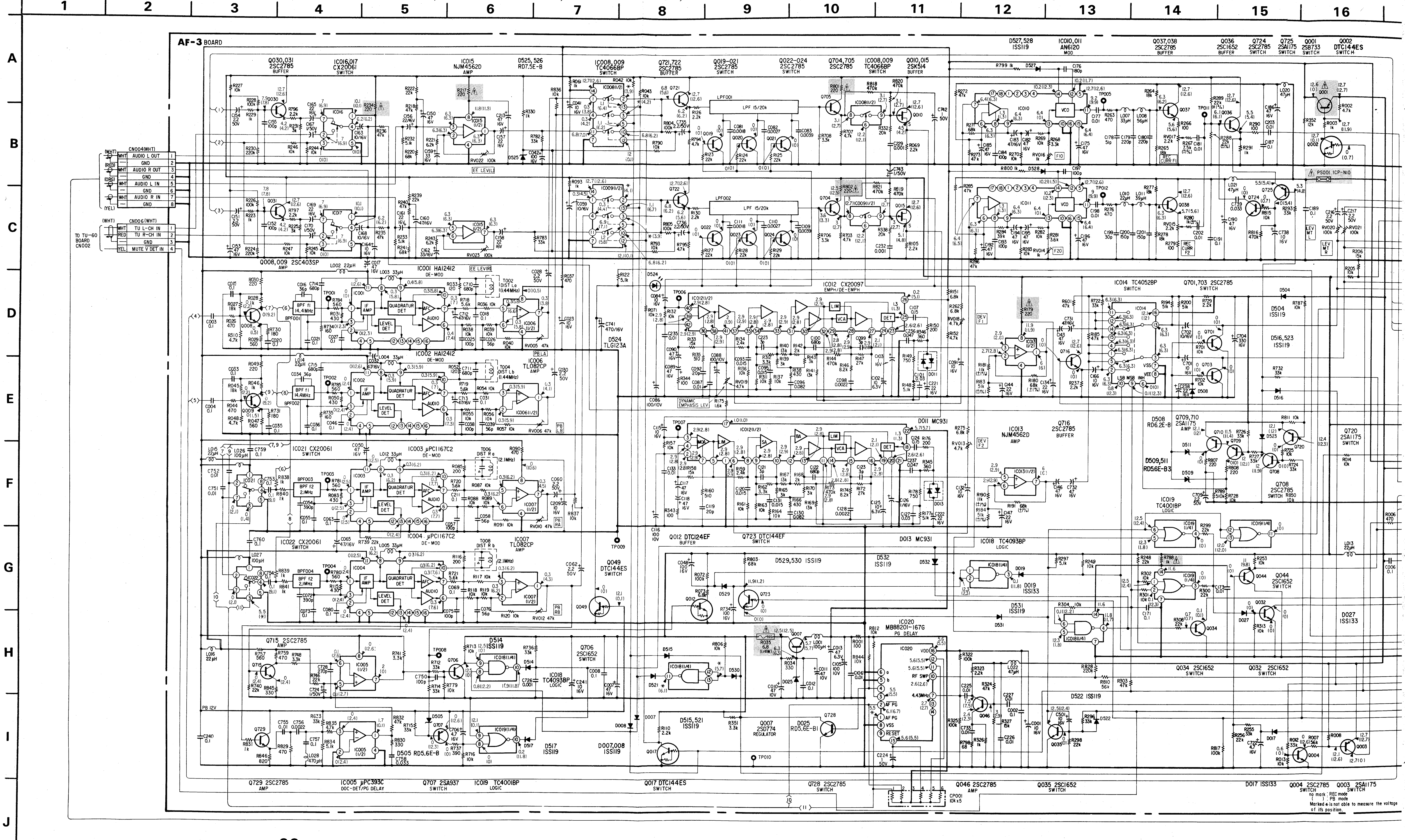
		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
23 12			IC801 510	IC501 506 505	509 511 508 507 504	502	501 513 512				001 002	003 IC001				Q IC
505 9				801	802 507 506		508	601	301 306		309	001 303	305	302 304	307	D
		TP503	RV501 TP506 RV503	RV502	TP508 TP509	CT501	TP504 TP502	RV501							RV301	ADJ TP


A
B
C
D
E
F
G
H
I
J
RL-18 BOARD
CN801 (WHT)
CONT 12V OUT
SWD 12V(M)OUT
GND (M)
AUDIO L OUT
AUDIO R OUT
GND (M)
VR MAX OUT
CN802 (WHT)
SWD 12V(E) OUT
AUDIO SEL IN
VIDEO SEL IN
SWD 12V(M) OUT
CONT 12V IN
AV/Ā IN
LPF ON IN
AUTO/NORM IN
HI CUT IN
PB OUT
GND
GND (E)
no mark : REC mode
( ) : PB mode
1-612-330
CHASSIS EARTH
IC801
D801
D802
CN803 (BLK)
CN807
CN806
CN805
CN804
AUDIO L IN
AUDIO R IN
GND
VR MAX IN
HI CUT OUT
PB IN
AUDIO SEL OUT
VIDEO SEL OUT
SWD 12V(E) IN
AV/Ā OUT
SWD 12V(M) IN
GND
LPF ON IN
AV/Ā IN
AUTO/NORM IN
TO SS-28 BOARD CN612
TO SS-28 BOARD CN305
CN007 (RED)
LPF ON IN
AV/Ā IN
AUTO/NORM IN
GND
GND (E)
AUDIO L OUT
AUDIO R OUT
GND
AUDIO R IN
AUDIO R OUT
SW-31 BOARD
LINE/CAMERA — TUNER — SIMUL
S601 INPUT SELECT
S602 LEVEL METER
S603 RECORD
S604 MPX FILTER
S605 BETA Hi-Fi
S606 TONE
VIDEO — SOUND
ON — OFF
AUTO NORM
D601
R601
1-612-326
SWD 12V (E) IN
AUDIO SEL OUT
VIDEO SEL OUT
SWD 12V (M) IN
CONT 12V OUT
AV/Ā OUT
LPF ON OUT
AUTO/NORM OUT
HI CUT OUT
PB IN
GND (M)
GND (E)
LEVEL METER UNIT BOARD
SV-12 BOARD
1-612-325
RV501
REC LEVEL
CHASSIS EARTH
CN004 (WHT)
REEL B
REEL C
REEL E
CAPSTAN B
CAPSTAN C
CAPSTAN E
TO SS-28 BOARD CN308
PT-7 BOARD
CN004
CN001
CN002
CN003
Q001
Q002
Q003
D001
IC001
1-612-336
no mark : REC mode
( ) : CUE mode
( ) : FF mode
SWD 12V (E)OUT
GND
TO SW REG BLOCK M BOARD CN006
CN003 (RED)
AUDIO L OUT
AUDIO R OUT
GND
AUDIO L IN
AUDIO R IN
GND
CN002 (WHT)
HP-7 BOARD
1-612-324
JK401 HEADPHONE
AM-5 BOARD
AUDIO HEAD(G)
AUDIO HEAD(Y)
AUDIO HEAD(X)
ERASE HEAD(X)
ERASE HEAD(G)
AUDIO HEAD
FULL ERASE HEAD
AUDIO ERASE HEAD
CN503 (RED)
TP502
TP503
TP504
TP506
TP508
TP509
RV501
RV502
RV503
IC501
CT501
T501
D506
D507
D508
Q504
Q505
Q506
Q507
Q508
Q509
Q510
Q511
Q512
Q513
1-612-335
CN501 (WHT)
AM AUDIO OUT
AM AUDIO IN
GND
SWD 12V(E) IN
GND (E)
CN502 (BLK)
HI CUT IN
BIAS CONT IN
REC P̄ IN
PB IN
AUDIO MUTE IN
TO SS-28 BOARD CN615
no mark : REC mode
( ) : PB mode
FU-22 BOARD
S301 RECORD
S302 EJECT
S303 STOP
S304 FF
S305 REW
S306 PLAY
S307 PAUSE
S308 ON/STANDBY
D301 RECORD
D302 CASSETTE INSIDE
D303 FF
D304 REW
D305 PB
D306 PAUSE
D307
D308 Beta hi-fi
D309 SOUND
PHONES LEVEL RV301
CN301
CN302
1-612-323
CN301 (WHT)
POWER SW OUT
PAUSE KEY OUT
PB KEY OUT
REW KEY OUT
FF KEY OUT
STOP KEY OUT
EJECT KEY OUT
REC KEY OUT
GND (E)
TO SS-28 BOARD CN614
CN302 (WHT)
PAUSE LED IN
PB LED IN
REW LED IN
FF LED IN
CASSETTE LED IN
REC LED IN
SWD 5V IN
TO SS-28 BOARD CN613
β HIFI IN
AUDIO IN
GND
AUDIO L OUT
AUDIO R OUT
GND
AUDIO L IN
AUDIO R IN
GND

AUDIO AUDIO

AF-3 (AFM SIGNAL RECORD/PLAYBACK PROCESS), AM-5 (AUDIO SIGNAL REC/PB PROCESS), RL-18 (LEVEL METER DRIVE), FU-22 (HEADPHONE LEVEL), PT-7 (HEADPHONE AMP), HP-7 (HEADPHONE JACK), SW-31 (FUNCTION SWITCH), SV-12 (

– Ref. No. AF-3 BOARD : 3000 series, AM-5 BOARD : 2000 series, RL-18 BOARD : 5000 series, FU-22 BOARD : 7000 series, PT-7 BOARD : 7700 series, HP-7 BOARD : 5000 series, SW-31 BOARD : 6000 series, SV-12 BOARD : 6000 series –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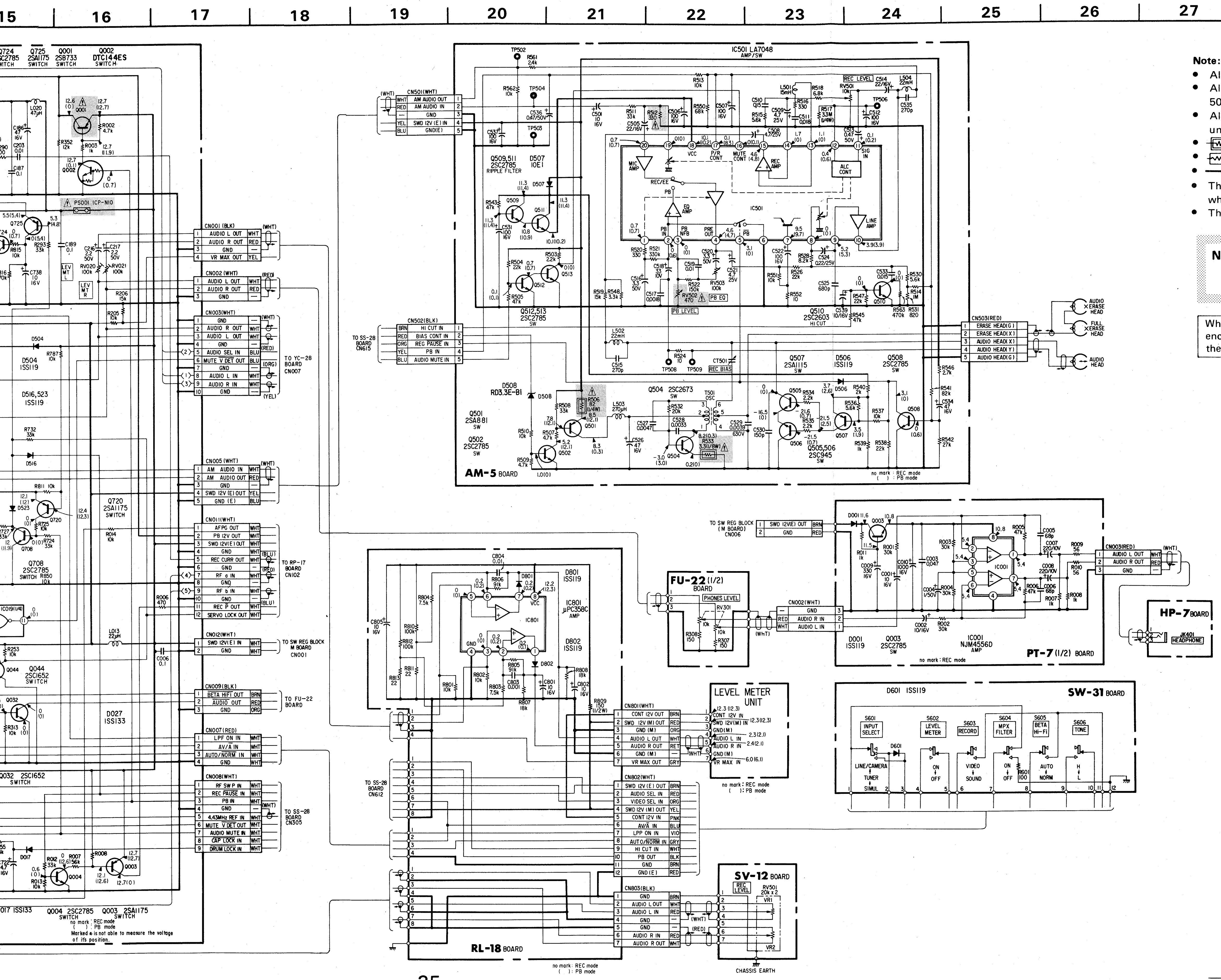
11
12
13
14
15
16
A
B
C
D
E
F
G
H
I
J
AF-3 BOARD
CN004(WHT)
AUDIO L OUT
GND
AUDIO R OUT
GND
AUDIO L IN
GND
AUDIO R IN
GND
CN006(WHT)
TU L-CH IN
TU R-CH IN
GND
MUTE V DET IN
TO TU-60 BOARD CN002
Q030,031 2SC2785 BUFFER
IC016,017 CX20061 SWITCH
IC015 NJM4562D AMP
D525,526 RD7.5E-B
IC008,009 TC4066BP SWITCH
Q721,722 2SC2785 BUFFER
Q019-021 2SC2785 SWITCH
Q022-024 2SC2785 SWITCH
Q704,705 2SC2785 SWITCH
IC008,009 TC4066BP SWITCH
Q010,015 2SK514 BUFFER
D527,528 ISS119
IC010,011 AN6120 MOD
Q037,038 2SC2785 BUFFER
Q036 2SC1652 BUFFER
Q724 2SC2785 SWITCH
Q725 2SA1175 SWITCH
Q001 2SB733 SWITCH
Q002 DTC144ES SWITCH
LPF 15/20k
LPF001
LPF002
EE LEVEL
VCO
PS001 ICP-N10
Q008,009 2SC403SP AMP
IC001 HA12412 DE-MOD
IC002 HA12412 DE-MOD
BPF 14.4MHz
IF AMP
QUADRATURE DET
LEVEL DET
AFC
AUDIO
DIST Lo (1.44MHz)
DIST Lb (1.44MHz)
IC006 TL082CP AMP
IC012 CX20097 EMPH/DE-EMPH
LIM
VCA
DET
DYNAMIC EMPHASIS LEV
D524 TLG123A
IC014 TC4052BP SWITCH
Q701,703 2SC2785 SWITCH
D504 ISS119
D516,523 ISS119
IC021 CX20061 SWITCH
IC003 μPC1167C2 DE-MOD
IC022 CX20061 SWITCH
IC004 μPC1167C2 DE-MOD
BPF 12 2.1MHz
DIST Re (2.1MHz)
DIST Rb (2.1MHz)
IC007 TL082CP AMP
Q049 DTC144ES SWITCH
D011 MC931
IC013 NJM4562D AMP
Q716 2SC2785 BUFFER
D508 RD6.2E-B
Q709,710 2SA1175 AMP
D509,511 RD5.6E-B3
Q720 2SA1175 SWITCH
Q708 2SC2785 SWITCH
IC019 TC4001BP LOGIC
Q012 DTC124EF BUFFER
Q723 DTC144EF SWITCH
D013 MC931
IC018 TC4093BP LOGIC
D529,530 ISS119
D532 ISS119
D019 ISS133
D531 ISS119
Q044 2SC1652 SWITCH
Q715 2SC2785 AMP
D514 ISS119
IC018 TC4093BP LOGIC
Q706 2SC1652 SWITCH
IC020 MB88201-167G PG DELAY
Q034 2SC1652 SWITCH
Q032 2SC1652 SWITCH
D027 ISS133
D522 ISS119
PB 12V
D505 RD5.6E-B
D517 ISS119
D007,008 ISS119
D515,521 ISS119
Q007 2SD774 REGULATOR
D025 RD5.6E-B1
Q729 2SC2785 AMP
IC005 μPC393C DOC-DET/PG DELAY
Q707 2SA937 SWITCH
IC019 TC4001BP LOGIC
Q017 DTC144ES SWITCH
Q728 2SC2785 SWITCH
Q046 2SC2785 AMP
Q035 2SC1652 SWITCH
D017 ISS133
Q004 2SC2785 SWITCH
Q003 2SA1175 SWITCH
CP001 10k×5
TP009
TP010
no mark : REC mode
( ) : PB mode
Marked ✱ is not able to measure the voltage of it's position.

UNCTION SWITCH), SV-12 (AUDIO LEVEL), LEVEL METER UNIT SCHEMATIC DIAGRAM


15
16
17
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21
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23
24
25
26
27
28
29
30
31
IC501 LA7048 AMP/SW
AM-5 BOARD
FU-22 (1/2) BOARD
PT-7 (1/2) BOARD
IC001 NJM4556D AMP
HP-7 BOARD
LEVEL METER UNIT
SW-31 BOARD
RL-18 BOARD
SV-12 BOARD
IC801 μPC358C AMP
TO SS-28 BOARD CN615
TO YC-28 BOARD CN007
TO RP-17 BOARD CN102
TO SW REG BLOCK M BOARD CN001
TO FU-22 BOARD
TO SS-28 BOARD CN305
TO SS-28 BOARD CN612
TO SW REG BLOCK (M BOARD) CN006
AUDIO ERASE HEAD
FULL ERASE HEAD
AUDIO HEAD
CHASSIS EARTH
no mark : REC mode
( ) : PB mode
Marked ✱ is not able to measure the voltage of its position.

Note:

- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted.
  50V or less are not indicated except for electrolytic capacitors.
- All variable and semi fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ▭ : Fusible resistor
- ——— : B+ bus.
- The voltage value is reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

AUDIO AUDIO

AF-3 (AFM SIGNAL RECORD/PLAYBACK PROCESS), AM-5 (AUDIO SIGNAL REC/PB PROCESS), RL-18 (LEVEL METER DRIVE), FU-22 (HEADPHONE LEVEL), PT-7 (HEADPHONE AMP), HP-7 (HEADPHONE JACK), SW-31 (FUNCTION SWITCH), SV-12 (AU

– Ref. No. AF-3 BOARD : 3000 series, AM-5 BOARD : 2000 series, RL-18 BOARD : 5000 series, FU-22 BOARD : 7000 series, PT-7 BOARD : 7700 series, HP-7 BOARD : 5000 series, SW-31 BOARD : 6000 series, SV-12 BOARD : 6000 series –

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

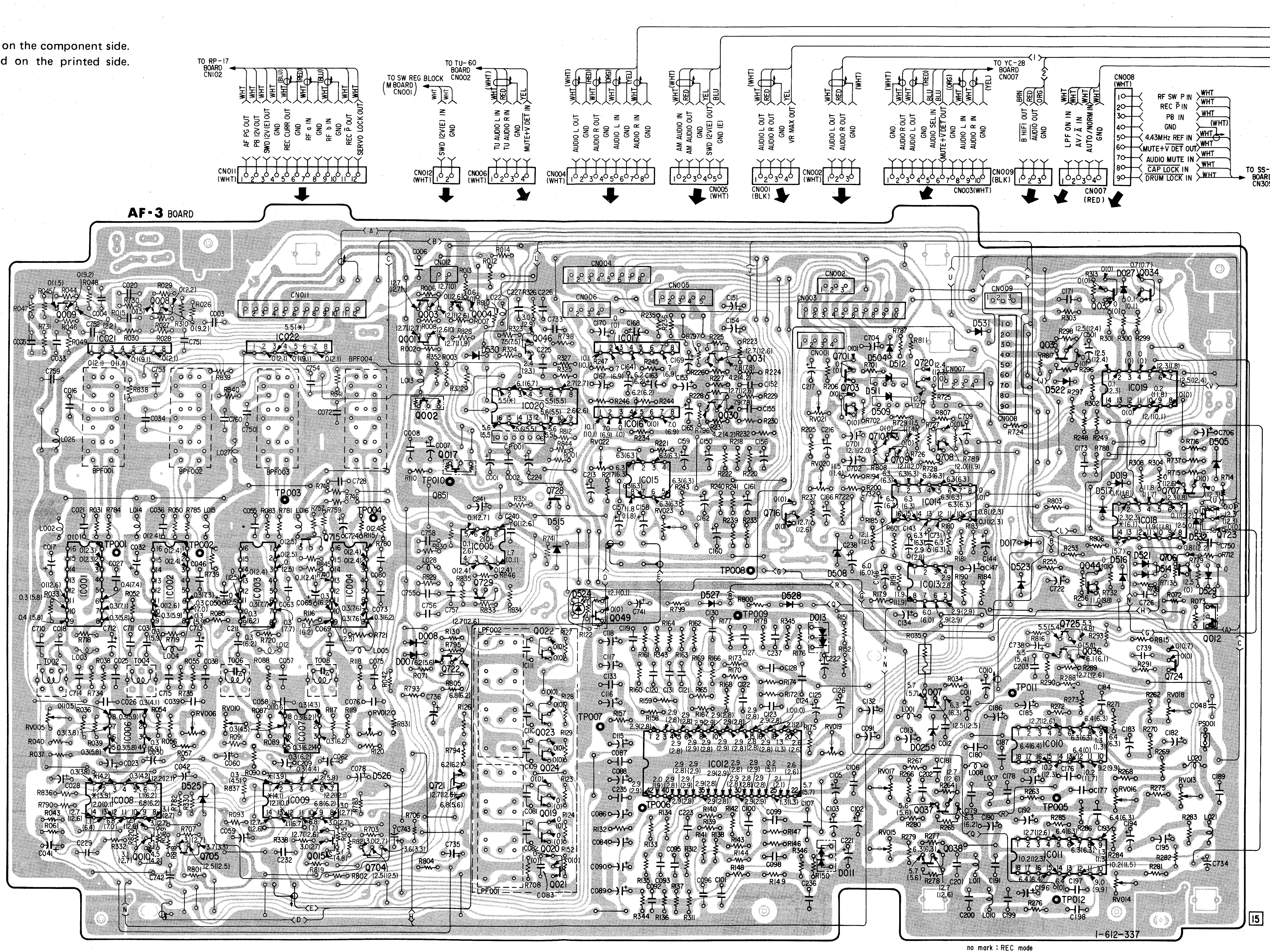
A B C D E F G H I J

Note:

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern

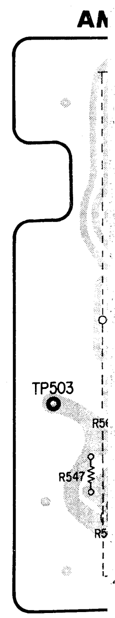
When indicating parts by reference number, please include the board name.

Q , IC	D	RV, TP
032 034	027	
008 003		
009 004 IC022	531 504	
001 , 046 IC02 , IC017 031 035 701	530	
703 720 IC019	511 522	RV021
	509	
002 IC020 030 IC016		
710 708		RV020
709	505	RV022
017 707	019	
IC015 IC014 723	517 532	TP003 TP010
728 IC018		TP004
716		RV023
715	017	TP001
IC005 706	515 521 508	TP002
044 IC001 , IC002	516 514 529	TP008
IC003 IC004	523	
IC013 729	528	
012 049	524 , 527	
725 724		TP009
036 022	013 008	
	007	
722		TP011 RV018
		RV006
007		RV010
023		RV012
IC006	025	RV005
IC007		TP007
IC010		
IC012 024		RV019
721		RV016 RV017
019	525	RV013
IC008		TP005
IC009 , 037		TP006
020 010 015		
705 704 038 IC011 021	011	RV015
		RV014
		TP012
Q , IC	D	RV, TP


AF-3 BOARD
TO RP-17 BOARD CN102
TO SW REG BLOCK (M BOARD) CN001
TO TU-60 BOARD CN002
TO YC-28 BOARD CN007
TO SS-28 BOARD CN305
CN011 (WHT)
CN012 (WHT)
CN006 (WHT)
CN004 (WHT)
CN005 (WHT)
CN001 (BLK)
CN002 (WHT)
CN003 (WHT)
CN009 (BLK)
CN007 (RED)
CN008 (WHT)
AF PG OUT
PB 12V OUT
SWD 12V(E) OUT
GND
REC CURR OUT
GND
RF a IN
GND
RF b IN
GND
REC P OUT
SERVO LOCK OUT
SWD 12V(E) IN
GND
TU AUDIO L IN
TU AUDIO R IN
GND
MUTE+V DET IN
AUDIO L OUT
GND
AUDIO R OUT
GND
AUDIO L IN
GND
AUDIO R IN
GND
AM AUDIO IN
AM AUDIO OUT
GND
SWD 12V(E) OUT
GND (E)
AUDIO L OUT
AUDIO R OUT
GND
VR MAX OUT
AUDIO SEL IN
MUTE+V DET OUT
B HIFI OUT
AUDIO OUT
LPF ON IN
AV/Ā IN
AUTO/NORM IN
RF SW P IN
REC P IN
PB IN
4.43MHz REF IN
MUTE+V DET OUT
AUDIO MUTE IN
CAP LOCK IN
DRUM LOCK IN
WHT
RED
BLU
YEL
ORG
BRN
1-612-337
15

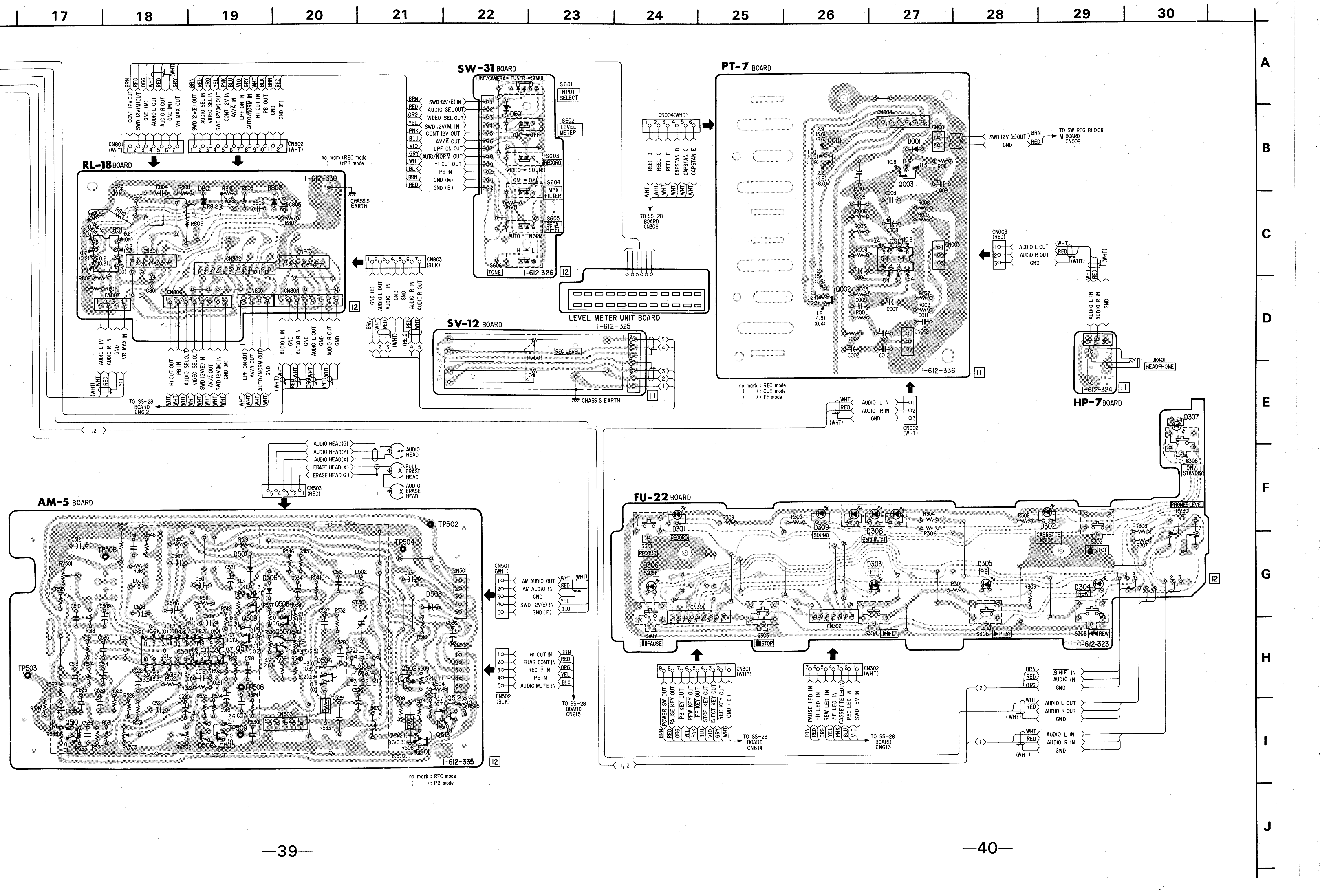
no mark : REC mode
( ) : PB mode
Marked ✱ is not able to measure the voltage of it's position

Q , IC	D	ADJ, TP
	601	
	001	
001 003		
	801 802	
IC801 IC001		
002		
		RV501
	307	
	301 , 309 , 308 302	TP502
		RV301
		TP504 TP506
	507 506	RV501
	306 , 303 , 305 304	
509 , 508	508	
		CT501
511 , 507		
IC501		
504 502		TP503 TP508
512 513		RV503 RV502 TP509
510 , 506 505 , 501		
Q , IC	D	ADJ, TP


AM
TP503
R547

NCTION SWITCH), SV-12 (AUDIO LEVEL), LEVEL METER UNIT PRINTED WIRING BOARDS

C	D	ADJ, TP
	601	
	001	
003		
	801 802	
C001		
002		
		RV501
	307	
	301,309,308 302	TP502 RV301 TP504 TP506
	507 506	RV501
	306,303,305 304	
08	508	
		CT501
07		
01		
04 502		TP503 TP508
512 513		RV503 RV502 TP509
06 01		
IC	D	ADJ, TP



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23
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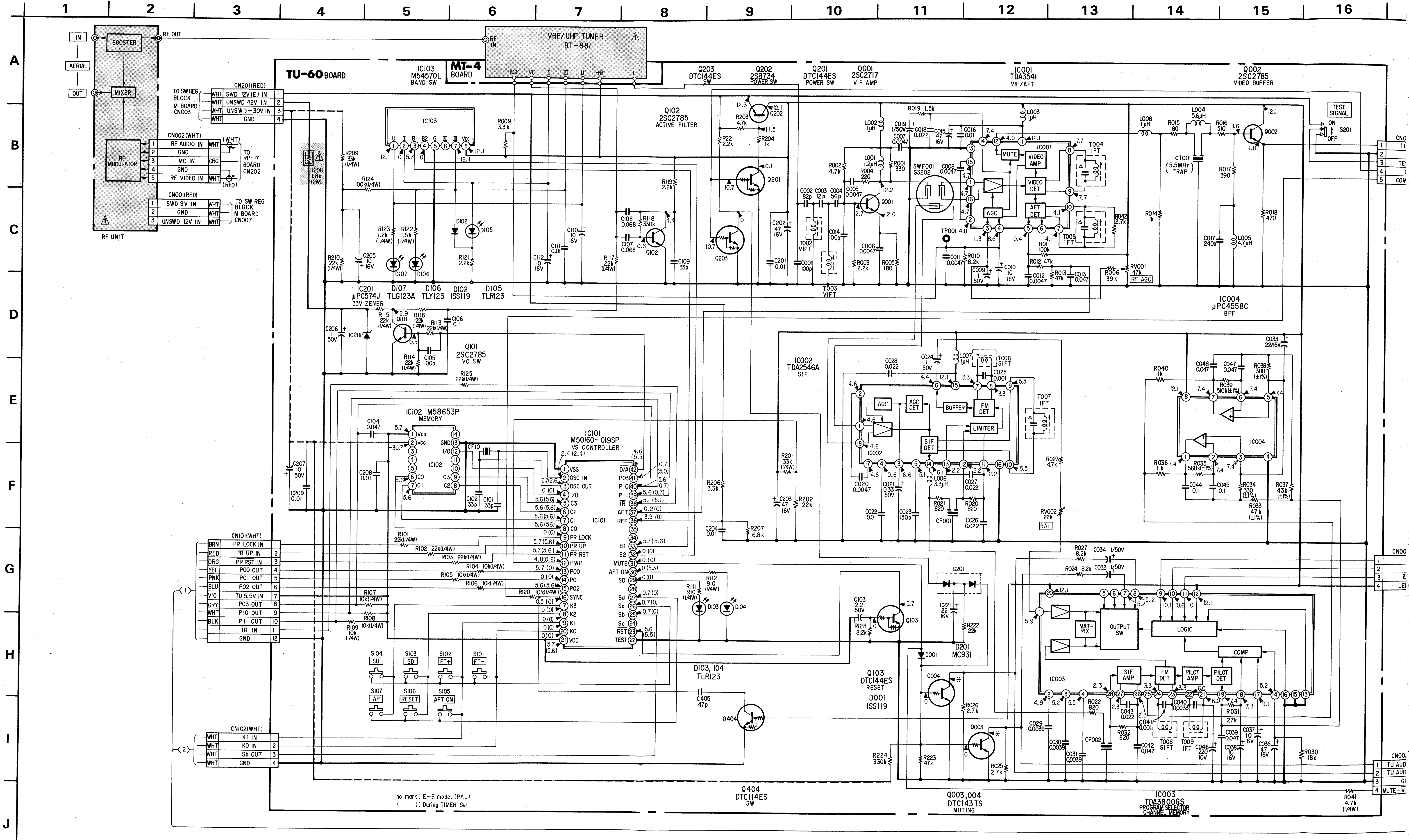
27
28
29
30
A
B
C
D
E
F
G
H
I
J
RL-18 BOARD
1-612-330
CHASSIS EARTH
CN801 (WHT)
CN802 (WHT)
CN803 (BLK)
IC801
D801
D802
no mark : REC mode
( ) : PB mode
CONT 12V OUT
SWD 12V(M) OUT
GND (M)
AUDIO R OUT
AUDIO L OUT
VR MAX OUT
SWD 12V(E) OUT
AUDIO SEL IN
VIDEO SEL IN
SWD 12V(M) OUT
CONT 12V IN
AV/Ā IN
LPF ON IN
HI CUT IN
PB OUT
GND (E)
TO SS-28 BOARD CN612
SW-31 BOARD
1-612-326
LINE/CAMERA - TUNER - SIMUL
S601 INPUT SELECT
S602 LEVEL METER
S603 RECORD
S604 MPX FILTER
S605 BETA HI-FI
S606 TONE
D601
VIDEO → SOUND
ON → OFF
AUTO NORM
SWD 12V (E) IN
AUDIO SEL OUT
VIDEO SEL OUT
SWD 12V(M) IN
CONT 12V OUT
AV/Ā OUT
LPF ON OUT
AUTO/NORM OUT
HI CUT OUT
PB IN
GND (M)
GND (E)
CN004 (WHT)
REEL B
REEL C
REEL E
CAPSTAN B
CAPSTAN C
CAPSTAN E
TO SS-28 BOARD CN308
LEVEL METER UNIT BOARD
1-612-325
SV-12 BOARD
RV501
REC LEVEL
CHASSIS EARTH
PT-7 BOARD
1-612-336
IC001
Q001
Q002
Q003
D001
CN001
CN002
CN003 (RED)
SWD 12V (E) OUT
GND
TO SW REG BLOCK M BOARD CN006
AUDIO L OUT
AUDIO R OUT
AUDIO L IN
AUDIO R IN
CN002 (WHT)
no mark : REC mode
( ) : CUE mode
( ) : FF mode
HP-7 BOARD
1-612-324
JK401 HEADPHONE
AUDIO HEAD(G)
AUDIO HEAD(Y)
AUDIO HEAD(X)
ERASE HEAD(X)
ERASE HEAD(G)
AUDIO HEAD
FULL ERASE HEAD
AUDIO ERASE HEAD
CN503 (RED)
AM-5 BOARD
1-612-335
IC501
TP502
TP503
TP504
TP506
TP508
TP509
CT501
RV501
RV502
RV503
CN501 (WHT)
AM AUDIO OUT
AM AUDIO IN
SWD 12V(E) IN
GND (E)
CN502 (BLK)
HI CUT IN
BIAS CONT IN
REC P̄ IN
PB IN
AUDIO MUTE IN
TO SS-28 BOARD CN615
no mark : REC mode
( ) : PB mode
FU-22 BOARD
1-612-323
D307
S308 ON/STANDBY
PHONES LEVEL RV301
S301 RECORD
D301 RECORD
D309 SOUND
D308 Beta hi-fi
D302 CASSETTE INSIDE
S302 EJECT
D306 PAUSE
D303 FF
D305 PB
D304 REW
S307 PAUSE
S303 STOP
S304 FF
S306 PLAY
S305 REW
CN301 (WHT)
CN302 (WHT)
POWER SW OUT
PAUSE KEY OUT
PB KEY OUT
REW KEY OUT
FF KEY OUT
STOP KEY OUT
EJECT KEY OUT
GND (E)
PAUSE LED IN
PB LED IN
REW LED IN
FF LED IN
CASSETTE LED IN
REC LED IN
SWD 5V IN
TO SS-28 BOARD CN614
TO SS-28 BOARD CN613
β HIFI IN
AUDIO IN

TUNER/TIMER TUNER/TIMER

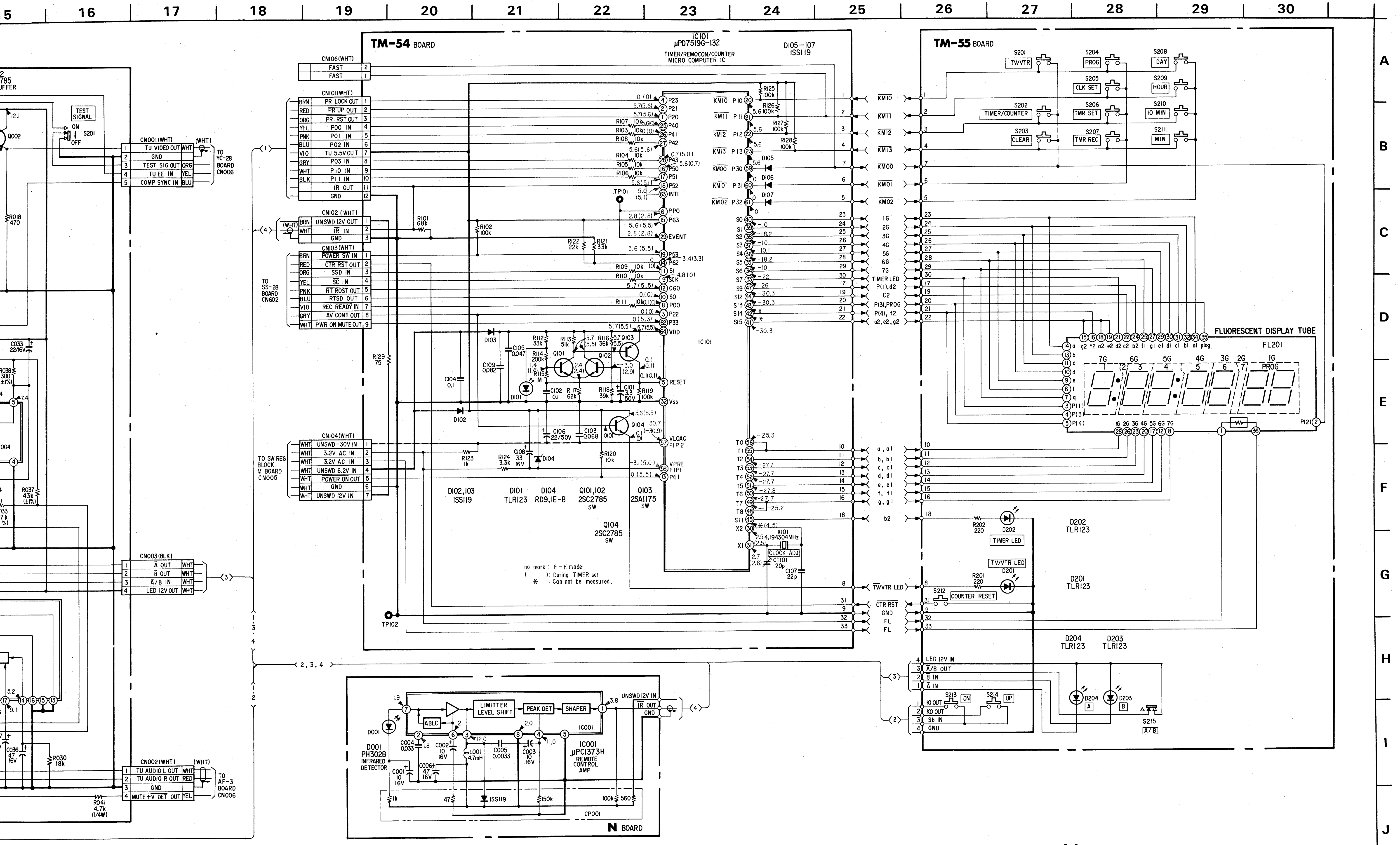
TU-60 (VIF, SIF, AFT, AGC CHANNEL PRESET), MT-9 (TUNER), TM-54 (TIMER, REMOTE CONTROL, COUNTER), TM-55 (CHANNEL SWITCH, TIMER SWITCH), N (INFRARED AMP) SCHEMATIC DIAGRAM

– Ref. No. TU-60, MT-4 BOARD : 5000 series, TM-54 BOARD: 6000 series, TM-55 BOARD : 6000 series, N BOARD : 6400 series –



RF UNIT
BOOSTER
MIXER
RF MODULATOR
AERIAL
IN
OUT
RF OUT
VHF/UHF TUNER BT-881
TU-60 BOARD
MT-4 BOARD
IC103 M54570L BAND SW
IC201 μPC574J 33V ZENER
D107 TLG123A
D106 TLY123
D102 ISS119
D105 TLR123
Q101 2SC2785 VC SW
Q102 2SC2785 ACTIVE FILTER
Q203 DTC144ES SW
Q202 2SB734 POWER SW
Q201 DTC144ES POWER SW
Q001 2SC2717 VIF AMP
IC001 TDA3541 VIF/AFT
Q002 2SC2785 VIDEO BUFFER
IC004 μPC4558C BPF
IC002 TDA2546A SIF
IC102 M58653P MEMORY
IC101 M50160-019SP VS CONTROLLER
D103, 104 TLR123
Q103 DTC144ES RESET
D001 ISS119
D201 MC931
Q404 DTC114ES SW
Q003,004 DTC143TS MUTING
IC003 TDA3800GS PROGRAM SELECTOR CHANNEL MEMORY
CN101(WHT)
CN102(WHT)
CN201(RED)
CN002(WHT)
CN001(RED)
TEST SIGNAL
S201
S104 SU
S103 SD
S102 FT+
S101 FT-
S107 AP
S106 RESET
S105 AFT ON
no mark: E-E mode. (PAL)
( ): During TIMER Set

TUNER/TIMER TUNER/TIMER

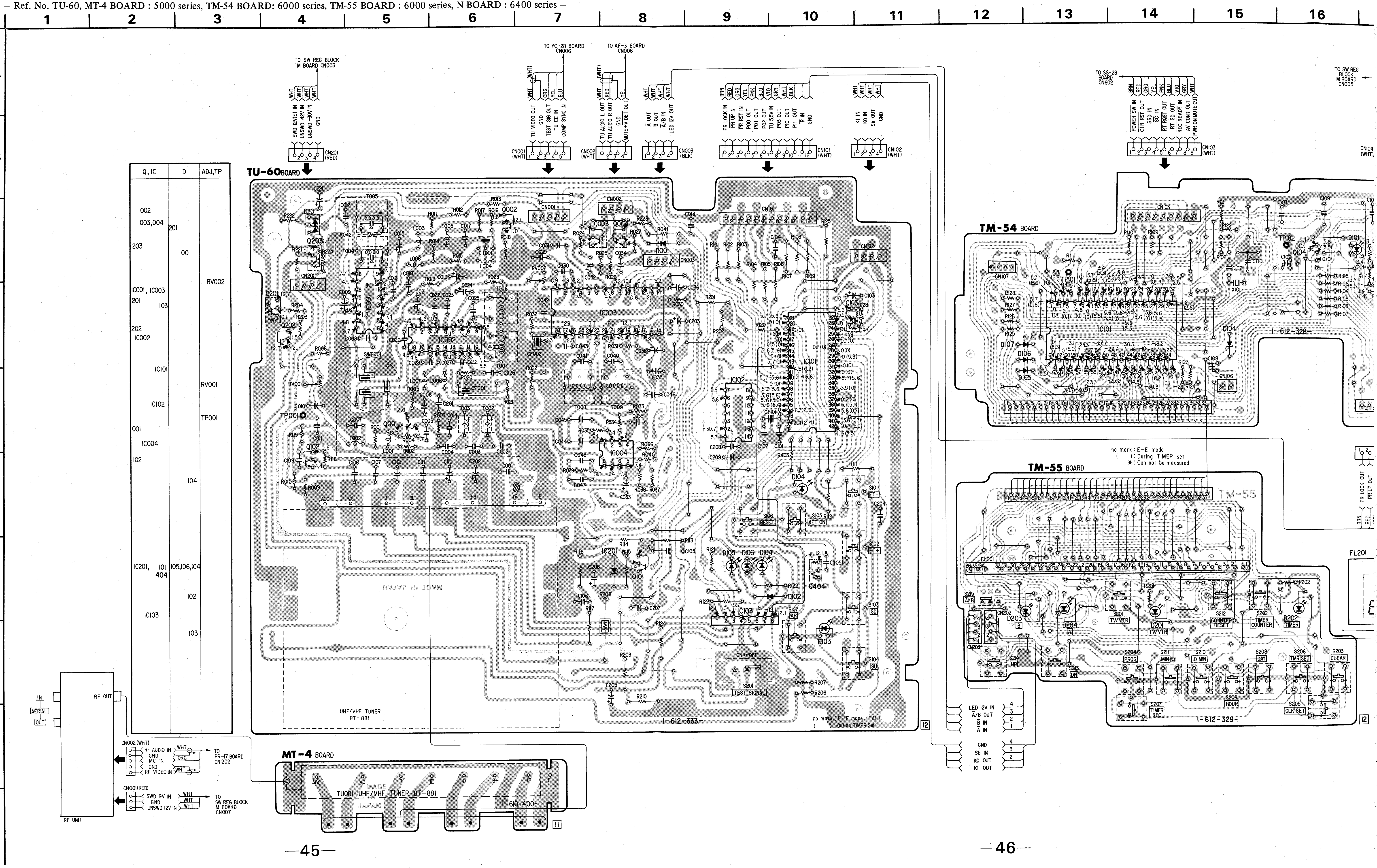


TM-54 BOARD
IC101 μPD7519G-132
TIMER/REMOCON/COUNTER MICRO COMPUTER IC
D105–107 ISS119
CN106(WHT) FAST FAST
CN101(WHT)
PR LOCK OUT
PR UP OUT
PR RST OUT
P00 IN
P01 IN
P02 IN
TU 5.5V OUT
P03 IN
P10 IN
P11 IN
IR OUT
GND
CN102 (WHT)
UNSWD 12V OUT
IR IN
GND
CN103(WHT)
POWER SW IN
CTR RST OUT
SSD IN
SC IN
RT RDST OUT
RTSD OUT
REC READY IN
AV CONT OUT
PWR ON MUTE OUT
TO SS-28 BOARD CN602
CN104(WHT)
UNSWD -30V IN
3.2V AC IN
3.2V AC IN
UNSWD 6.2V IN
POWER ON OUT
GND
UNSWD 12V IN
TO SW REG BLOCK M BOARD CN005
CN001(WHT)
TU VIDEO OUT
GND
TEST SIG OUT
TU EE IN
COMP SYNC IN
TO YC-28 BOARD CN006
TEST SIGNAL
S201 ON OFF
CN003(BLK)
A OUT
B OUT
A/B IN
LED 12V OUT
CN002(WHT)
TU AUDIO L OUT
TU AUDIO R OUT
GND
MUTE+V DET OUT
TO AF-3 BOARD CN006
R041 4.7k (1/4W)
R030 18k
R018 470
R037 43k (±1%)
C033 22/16V
D102,103 ISS119
D101 TLR123
D104 RD9.1E-B
Q101,102 2SC2785 SW
Q103 2SA1175 SW
Q104 2SC2785 SW
TP101
TP102
RESET
VSS
VDD
VLOAC FIP2
VPRE FIP1
EVENT
X101 4.194304MHz
CLOCK ADJ
CT101 20p
C107 22p
no mark : E–E mode
( ) : During TIMER set
* : Can not be measured.
KMI0 KMI1 KMI2 KMI3 KMO0 KMO1 KMO2
1G 2G 3G 4G 5G 6G 7G
TIMER LED
P(1),d2
C2
P(3),PROG
P(4), f2
a2,e2,g2
a,a1 b,b1 c,c1 d,d1 e,e1 f,f1 g,g1
b2
TV/VTR LED
CTR RST
GND
FL
FL
TM-55 BOARD
S201 TV/VTR
S202 TIMER/COUNTER
S203 CLEAR
S204 PROG
S205 CLK SET
S206 TMR SET
S207 TMR REC
S208 DAY
S209 HOUR
S210 10 MIN
S211 MIN
FLUORESCENT DISPLAY TUBE
FL201
D202 TIMER LED
D202 TLR123
D201 TV/VTR LED
D201 TLR123
S212 COUNTER RESET
R202 220
R201 220
D204 TLR123
D203 TLR123
LED 12V IN
A/B OUT
B IN
A IN
KI OUT
KO OUT
Sb IN
GND
S213 DN
S214 UP
S215 A/B
N BOARD
IC001 μPC1373H REMOTE CONTROL AMP
D001 PH302B INFRARED DETECTOR
ABLC
LIMITTER LEVEL SHIFT
PEAK DET
SHAPER
UNSWD 12V IN
IR OUT
GND
L001 4.7mH
C005 0.0033
CP001

TUNER/TIMER TUNER/TIMER

TU-60 (VIF, SIF, AFT, AGC CHANNEL PRESET), MT-9 (TUNER), TM-54 (TIMER, REMOTE CONTROL, COUNTER), TM-55 (CHANNEL SWITCH, TIMER SWITCH), N (INFRARED AMP) PRINTED WIRING BOARDS

– Ref. No. TU-60, MT-4 BOARD : 5000 series, TM-54 BOARD: 6000 series, TM-55 BOARD : 6000 series, N BOARD : 6400 series –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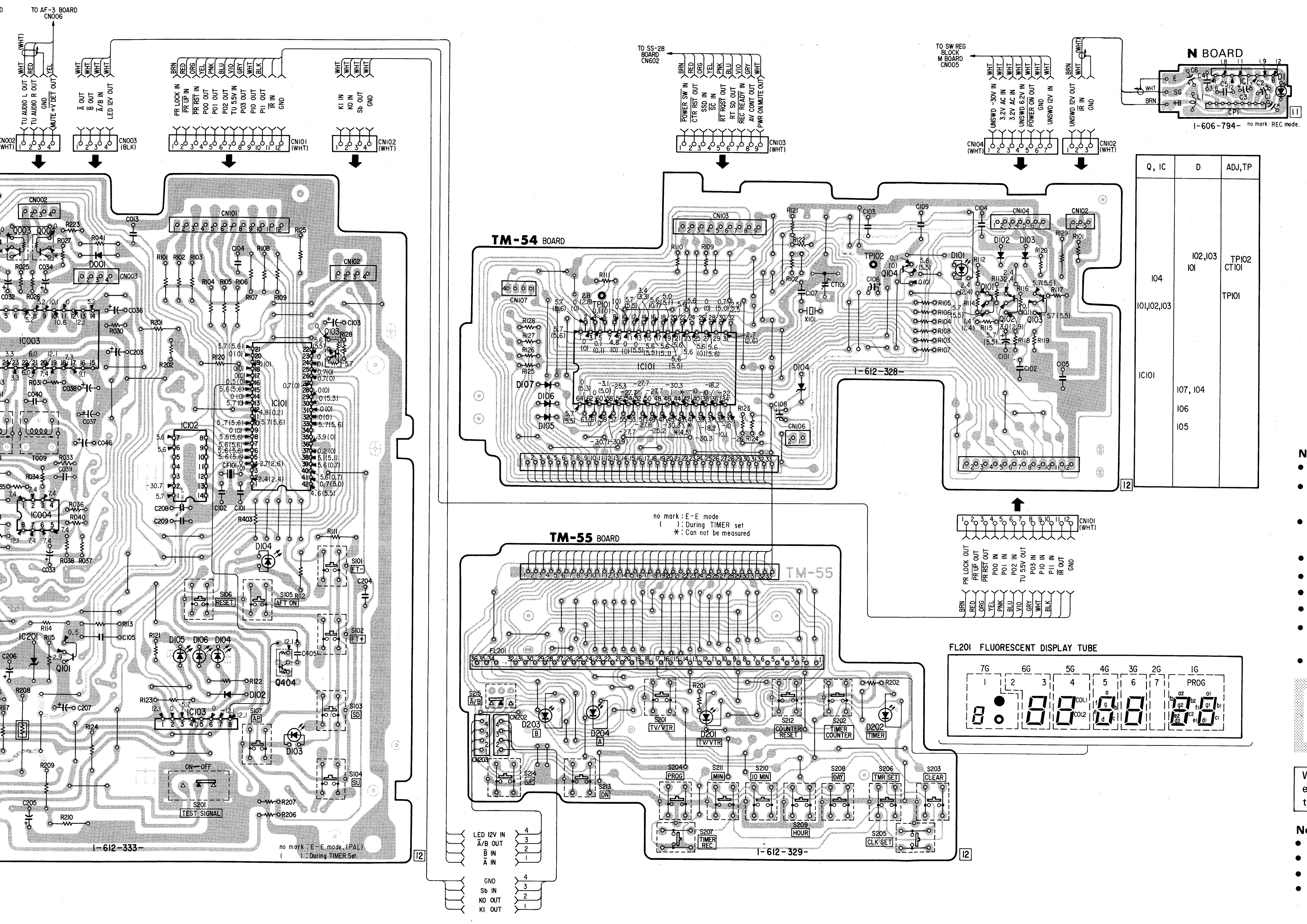
A
B
C
D
E
F
G
H
I
J
TO SW REG BLOCK M BOARD CN003
SWD 12V(E) IN
UNSWD 42V IN
UNSWD -30V IN
GND
CN201 (RED)
TO YC-28 BOARD CN006
TU VIDEO OUT
GND
TEST SIG OUT
TU EE IN
COMP SYNC IN
CN001 (WHT)
TO AF-3 BOARD CN006
TU AUDIO L OUT
TU AUDIO R OUT
GND
MUTE + V(ET OUT)
CN002 (WHT)
Ā OUT
B̄ OUT
Ā/B IN
LED 12V OUT
CN003 (BLK)
PR LOCK IN
PR UP IN
PR RST IN
P00 OUT
P01 OUT
P02 OUT
TU 5.5V IN
P03 OUT
P10 OUT
P11 OUT
IR IN
GND
CN101 (WHT)
KI IN
KO IN
Sb OUT
GND
CN102 (WHT)
TO SS-28 BOARD CN602
POWER SW IN
CTR RST OUT
SSD IN
SC IN
RT RQST OUT
RT SD OUT
REC READY IN
AV CONT OUT
PWR ON MUTE OUT
CN103 (WHT)
TO SW REG BLOCK M BOARD CN005
CN104 (WHT)
TU-60 BOARD
TM-54 BOARD
TM-55 BOARD
MT-4 BOARD
IC001
IC002
IC003
IC004
IC101
IC102
IC103
IC201
UHF/VHF TUNER BT-881
MADE IN JAPAN
1-612-333-
1-612-328-
1-612-329-
1-610-400-
S101 FT-
S102 FT+
S103 SD
S104 SU
S105 AFT ON
S106 RESET
S107 AP
S201 TEST SIGNAL
S201 TV/VTR
S202 TIMER COUNTER
S203 CLEAR
S204 PROG
S205 CLK SET
S206 TMR SET
S207 TIMER REC
S208 DAY
S209 HOUR
S210 10 MIN
S211 MIN
S212 COUNTER RESET
S213 DN
S214 UP
S215 Ā/B
D201 TV/VTR
D202 TIMER
D203 B
D204 A
FL201
TU001 UHF/VHF TUNER BT-881
AGC
VC
I
III
U
B+
IF
E
LED 12V IN
Ā/B OUT
B̄ IN
Ā IN
GND
Sb IN
KO OUT
KI OUT
IN
AERIAL
OUT
RF OUT
RF UNIT
CN002 (WHT)
RF AUDIO IN
GND
MC IN
GND
RF VIDEO IN
TO PR-17 BOARD CN 202
CN001 (RED)
SWD 9V IN
GND
UNSWD 12V IN
TO SW REG BLOCK M BOARD CN007
PR LOCK OUT
PR UP OUT

no mark : E-E mode
( ) : During TIMER set
✱ : Can not be measured

no mark : E-E mode (PAL)
( ) : During TIMER Set

Q, IC	D	ADJ,TP
002		
003,004	201	
203		
	001	
		RV002
IC001, IC003		
201		
103		
202		
IC002		
IC101		
		RV001
IC102		
		TP001
001		
IC004		
102		
	104	
IC201, 101 404	105,106,104	
	102	
IC103		
	103	

UNTER), TM-55 (CHANNEL SWITCH, TIMER SWITCH), N (INFRARED AMP) PRINTED WIRING BOARDS



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22
23
A
B
C
D
E
F
G
H
I
J
TO AF-3 BOARD CN006
TU AUDIO L OUT
TU AUDIO R OUT
GND
MUTE +V DET OUT
CN002 (WHT)
Ā OUT
B̄ OUT
Ā/B IN
LED 12V OUT
CN003 (BLK)
PR LOCK IN
PR UP IN
PR RST IN
P00 OUT
P01 OUT
P02 OUT
TU 5.5V IN
P03 OUT
P10 OUT
P11 OUT
IR IN
GND
CN101 (WHT)
KI IN
KO IN
Sb OUT
GND
CN102 (WHT)
TO SS-28 BOARD CN602
POWER SW IN
CTR RST OUT
SSD IN
SC IN
RT RQST OUT
RT SD OUT
REC READY IN
AV CONT OUT
PWR ON MUTE OUT
CN103 (WHT)
TO SW REG BLOCK M BOARD CN005
UNSWD -30V IN
3.2V AC IN
3.2V AC IN
UNSWD 6.2V IN
POWER ON OUT
GND
UNSWD 12V IN
CN104 (WHT)
UNSWD 12V OUT
IR IN
GND
CN102 (WHT)
N BOARD
1-606-794-
no mark : REC mode.
TM-54 BOARD
1-612-328-
IC101
TM-55 BOARD
no mark : E-E mode
( ) : During TIMER set
* : Can not be measured
1-612-329-
1-612-333-
no mark : E-E mode (PAL)
( ) : During TIMER Set
S201 TEST SIGNAL
S101 FT-
S102 FT+
S103 SD
S104 SU
S105 AFT ON
S106 RESET
S107 AP
S201 TV/VTR
S202 TIMER COUNTER
S203 CLEAR
S204 PROG
S205 CLK SET
S206 TMR SET
S207 TIMER REC
S208 DAY
S209 HOUR
S210 10 MIN
S211 MIN
S212 COUNTER RESET
S213 DN
S214 UP
S215 Ā/B
D201 TV/VTR
D202 TIMER
D203 B
D204 A
LED 12V IN
Ā/B OUT
B̄ IN
Ā IN
GND
Sb IN
KO OUT
KI OUT
CN101 (WHT)
PR LOCK OUT
PR UP OUT
PR RST OUT
P00 IN
P01 IN
P02 IN
TU 5.5V OUT
P03 IN
P10 IN
P11 IN
IR OUT
GND
FL201 FLUORESCENT DISPLAY TUBE
7G
6G
5G
4G
3G
2G
1G
PROG
COL1
COL2

Q, IC	D	ADJ,TP
	102,103 101	TP102 CT101
104		
101,102,103		TP101
IC101	107, 104	
	106	
	105	

Note:

- All resistors are in ohms, 1/6W unless otherwise noted.
- All capacitors are in μF (p:pF) unless otherwise noted. 50V or less are not indicated except for electrolytic capacitors.
- All variable and semi-fixed resistors have characteristic curve B, unless otherwise noted.
- ▭ : Nonflammable resistor
- ▭ : Fusible resistor
- —— : B + bus.
- – – – : B- bus.
- The voltage value is a reference value between the grounding when the color bar signal is received from a color bar generator.
- The voltage value is measured using a digital tester (10MΩ).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Note:

- ○— : indicates a lead wire mounted on the component side.
- ●— : indicates a lead wire mounted on the printed side.
- ▨ : soldering side
- ▨ : B+ pattern

ELECTRICAL PARTS LIST

Note:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

- =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.
- Items marked " ♠ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
- MF : µF, PF : µµF

RESISTORS
- All resistors are in ohms
- F : nonflammable

COILS
- MMH : mH, UH : µH

Ref.No	Part No.	Description			Remark
	♠:A-4910-049-A	R STATOR (REEL MOTOR) BOARD, COMPLETE **************************************			
	♠:1-560-460-00	PIN, CONNECTOR 4P			
		CAPACITOR			
C1	1-123-821-00	ELECT	47MF	20%	16V
C2	1-123-821-00	ELECT	47MF	20%	16V
C3	1-123-821-00	ELECT	47MF	20%	16V
C4	1-123-821-00	ELECT	47MF	20%	16V
		DIODE			
D1	8-719-941-48	DIODE 1N4148TP			
		IC			
IC1	8-759-108-77	IC CX877			
		TRANSISTOR			
Q1	8-729-100-01	TRANSISTOR 2SD992			
Q2	8-729-100-01	TRANSISTOR 2SD992			
Q3	8-729-100-01	TRANSISTOR 2SD992			
Q4	8-729-100-01	TRANSISTOR 2SD992			
Q5	8-729-100-01	TRANSISTOR 2SD992			
Q6	8-729-100-01	TRANSISTOR 2SD992			
		RESISTOR			
R1	1-247-823-00	CARBON	470	5%	1/6W
R2	1-247-823-00	CARBON	470	5%	1/6W
R3	1-247-823-00	CARBON	470	5%	1/6W
R4	1-247-829-00	CARBON	820	5%	1/6W
R5	1-247-871-00	CARBON	47K	5%	1/6W
R6	1-247-871-00	CARBON	47K	5%	1/6W
R7	1-247-871-00	CARBON	47K	5%	1/6W
R8	1-247-871-00	CARBON	47K	5%	1/6W
		DIODE			
S1	8-719-810-31	DIODE THS103-1			
S2	8-719-810-31	DIODE THS103-1			

Ref.No	Part No.	Description			Remark
	♠:A-6023-241-A	PT-7 BOARD, COMPLETE ********************			
	♠:3-684-037-01	HEAT SINK, PT			
	7-621-770-87	SCREW +B 2.6X5			
		CAPACITOR			
C001	1-123-356-00	ELECT	10MF	20%	16V
C002	1-123-356-00	ELECT	10MF	20%	16V
C003	1-101-006-00	CERAMIC	0.047MF		50V
C004	1-123-380-00	ELECT	1MF	20%	50V
C005	1-101-888-00	CERAMIC	68PF	5%	50V
C006	1-101-888-00	CERAMIC	68PF	5%	50V
C007	1-123-308-00	ELECT	220MF	20%	10V
C008	1-123-308-00	ELECT	220MF	20%	10V
C009	1-123-322-00	ELECT	330MF	20%	16V
C010	1-123-839-00	ELECT	1000MF	20%	16V
		CONNECTOR			
CN002	♠:1-560-891-00	PIN, CONNECTOR 3P			
CN003	♠:1-560-891-00	PIN, CONNECTOR 3P			
CN004	♠:1-560-894-00	PIN, CONNECTOR 6P			
		DIODE			
D001	8-719-911-19	DIODE 1SS119			
		IC			
IC001	8-759-745-56	IC NJM4556D			
		TRANSISTOR			
Q001	8-729-316-16	TRANSISTOR 2SC1061			
Q002	8-729-316-16	TRANSISTOR 2SC1061			
Q003	8-729-178-54	TRANSISTOR 2SC2785			
		RESISTOR			
R001	1-247-866-00	CARBON	30K	5%	1/6W
R002	1-247-866-00	CARBON	30K	5%	1/6W
R003	1-247-866-00	CARBON	30K	5%	1/6W
R004	1-247-866-00	CARBON	30K	5%	1/6W
R005	1-247-871-00	CARBON	47K	5%	1/6W
R006	1-247-871-00	CARBON	47K	5%	1/6W
R007	1-247-831-00	CARBON	1K	5%	1/6W
R008	1-247-831-00	CARBON	1K	5%	1/6W
R009	1-247-801-00	CARBON	56	5%	1/6W
R010	1-247-801-00	CARBON	56	5%	1/6W
R011	1-247-831-00	CARBON	1K	5%	1/6W

****

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
	♠:A-6711-527-A	YC-28 BOARD, COMPLETE **********************			
	1-536-796-21	TERMINAL BOARD, CONTROL PANEL			
		FILTER BAND PASS			
BPF001	1-235-098-00	FILTER, BAND PASS			
		CAPACITOR			
C001	1-123-356-00	ELECT	10MF	20%	16V
C002	1-123-356-00	ELECT	10MF	20%	16V
C003	1-123-356-00	ELECT	10MF	20%	16V
C004	1-123-356-00	ELECT	10MF	20%	16V
C005	1-123-356-00	ELECT	10MF	20%	16V
C006	1-123-356-00	ELECT	10MF	20%	16V
C007	1-101-004-00	CERAMIC	0.01MF		50V
C008	1-123-332-00	ELECT	47MF	20%	16V
C009	1-123-311-00	ELECT	1000MF	20%	10V
C010	1-123-356-00	ELECT	10MF	20%	16V
C011	1-123-356-00	ELECT	10MF	20%	25V
C013	1-123-306-00	ELECT	47MF	20%	10V
C014	1-123-381-00	ELECT	2.2MF	20%	50V
C015	1-123-306-00	ELECT	47MF	20%	10V
C016	1-108-589-00	MYLAR	0.027MF	5%	50V
C017	1-101-004-00	CERAMIC	0.01MF		50V
C018	1-123-306-00	ELECT	47MF	20%	10V
C019	1-101-004-00	CERAMIC	0.01MF		50V
C020	1-101-004-00	CERAMIC	0.01MF		50V
C021	1-101-004-00	CERAMIC	0.01MF		50V
C022	1-101-004-00	CERAMIC	0.01MF		50V
C023	1-101-882-00	CERAMIC	51PF	5%	50V
C024	1-130-047-00	FILM	180PF	5%	50V
C025	1-106-172-00	MYLAR	0.001MF	5%	50V
C026	1-101-059-00	CERAMIC	510PF	5%	50V
C027	1-161-045-00	CERAMIC	0.0033MF	10%	25V
C028	1-106-172-00	MYLAR	0.001MF	5%	50V
C029	1-123-382-00	ELECT	3.3MF	20%	50V
C031	1-101-004-00	CERAMIC	0.01MF		50V
C032	1-102-816-00	CERAMIC	120PF	5%	50V
C033	1-101-004-00	CERAMIC	0.01MF		50V
C034	1-101-004-00	CERAMIC	0.01MF		50V
C035	1-102-816-00	CERAMIC	120PF	5%	50V
C036	1-101-882-00	CERAMIC	51PF	5%	50V
C037	1-101-004-00	CERAMIC	0.01MF		50V
C038	1-101-004-00	CERAMIC	0.01MF		50V
C039	1-101-004-00	CERAMIC	0.01MF		50V
C040	1-101-004-00	CERAMIC	0.01MF		50V
C041	1-161-043-00	CERAMIC	0.0022MF	10%	25V
C042	1-102-516-00	CERAMIC	27PF	5%	50V
C043	1-101-004-00	CERAMIC	0.01MF		50V
C044	1-101-004-00	CERAMIC	0.01MF		50V
C045	1-102-523-00	CERAMIC	56PF	5%	50V
C046	1-101-004-00	CERAMIC	0.01MF		50V
C047	1-101-004-00	CERAMIC	0.01MF		50V
C048	1-101-004-00	CERAMIC	0.01MF		50V
C049	1-101-004-00	CERAMIC	0.01MF		50V
C050	1-102-865-00	CERAMIC	8PF	0.5PF	50V

Ref.No	Part No.	Description			Remark
C051	1-102-525-00	CERAMIC	68PF	5%	50V
C052	1-102-525-00	CERAMIC	68PF	5%	50V
C053	1-123-379-00	ELECT	0.47MF	20%	50V
C054	1-161-040-00	CERAMIC	0.0012MF	10%	25V
C055	1-123-380-00	ELECT	1MF	20%	50V
C056	1-102-962-00	CERAMIC	30PF	5%	50V
C057	1-102-981-00	CERAMIC	300PF	5%	50V
C058	1-123-306-00	ELECT	47MF	20%	10V
C059	1-101-004-00	CERAMIC	0.01MF		50V
C060	1-108-579-00	MYLAR	0.01MF	5%	50V
C061	1-123-382-00	ELECT	3.3MF	20%	50V
C062	1-123-306-00	ELECT	47MF	20%	10V
C063	1-101-004-00	CERAMIC	0.01MF		50V
C064	1-102-521-00	CERAMIC	43PF	5%	50V
C065	1-102-971-00	CERAMIC	82PF	5%	50V
C066	1-102-518-00	CERAMIC	33PF	5%	50V
C067	1-161-025-00	CERAMIC	0.1MF	10%	25V
C068	1-101-004-00	CERAMIC	0.01MF		50V
C069	1-102-962-00	CERAMIC	30PF	5%	50V
C070	1-101-004-00	CERAMIC	0.01MF		50V
C071	1-123-380-00	ELECT	1MF	20%	50V
C072	1-101-004-00	CERAMIC	0.01MF		50V
C073	1-102-525-00	CERAMIC	68PF	5%	50V
C074	1-102-525-00	CERAMIC	68PF	5%	50V
C075	1-101-004-00	CERAMIC	0.01MF		50V
C076	1-102-951-00	CERAMIC	15PF	5%	50V
C077	1-123-330-00	ELECT	22MF	20%	16V
C078	1-123-330-00	ELECT	22MF	20%	16V
C080	1-101-004-00	CERAMIC	0.01MF		50V
C082	1-161-024-00	CERAMIC	0.082MF	10%	25V
C083	1-102-977-00	CERAMIC	200PF	5%	50V
C084	1-123-369-00	ELECT	4.7MF	20%	25V
C085	1-101-004-00	CERAMIC	0.01MF		50V
C086	1-108-557-00	MYLAR	0.0012MF	5%	50V
C087	1-161-057-00	CERAMIC	0.033MF	10%	25V
C088	1-101-361-00	CERAMIC	150PF	5%	50V
C092	1-101-004-00	CERAMIC	0.01MF		50V
C093	1-101-006-00	CERAMIC	0.047MF		50V
C095	1-102-976-00	CERAMIC	180PF	5%	50V
C096	1-102-824-00	CERAMIC	470PF	5%	50V
C097	1-102-823-00	CERAMIC	430PF	5%	50V
C098	1-102-820-00	CERAMIC	330PF	5%	50V
C099	1-102-851-00	CERAMIC	15PF	5%	50V
C100	1-161-025-00	CERAMIC	0.1MF	10%	25V
C101	1-108-595-00	MYLAR	0.047MF	5%	50V
C102	1-161-043-00	CERAMIC	0.0022MF	10%	25V
C103	1-106-172-00	MYLAR	0.001MF	5%	50V
C104	1-102-977-00	CERAMIC	200PF	5%	50V
C105	1-102-973-00	CERAMIC	100PF	5%	50V
C106	1-123-356-00	ELECT	10MF	20%	16V
C107	1-161-025-00	CERAMIC	0.1MF	10%	25V
C108	1-101-004-00	CERAMIC	0.01MF		50V
C109	1-101-004-00	CERAMIC	0.01MF		50V

When indicating parts by reference number, please include the board name.

Ref.No	Part
C111	1-10
C112	1-10
C113	1-10
C114	1-10
C116	1-10
C117	1-10
C118	1-10
C119	1-12
C120	1-10
C121	1-10
C122	1-10
C123	1-10
C124	1-10
C125	1-12
C127	1-12
C128	1-12
C129	1-12
C130	1-12
C131	1-12
C132	1-12
C133	1-10
C134	1-10
C135	1-10
C136	1-10
C137	1-10
C138	1-10
C139	1-10
C140	1-10
C141	1-10
C142	1-12
C144	1-10
C145	1-10
C146	1-10
C147	1-10
C148	1-101
C155	1-101
C156	1-101
C157	1-102
C158	1-102
C159	1-102
C178	1-123
C179	1-123
C180	1-123
C181	1-106
C182	1-12
C183	1-101
C184	1-123
C185	1-123
C186	1-101
C187	1-123
C188	1-161
C189	1-123
C190	1-123
C191	1-101
C192	1-123
C196	1-123
C197	1-123

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Remark

16V
16V
50V
50V
50V

50V
10V
10V
16V
16V

Ref.No	Part No.	Description			Remark
	♠:A-6711-527-A	YC-28 BOARD, COMPLETE **********************			
	1-536-796-21	TERMINAL BOARD, CONTROL PANEL			
		FILTER BAND PASS			
BPF001	1-235-098-00	FILTER, BAND PASS			
		CAPACITOR			
C001	1-123-356-00	ELECT	10MF	20%	16V
C002	1-123-356-00	ELECT	10MF	20%	16V
C003	1-123-356-00	ELECT	10MF	20%	16V
C004	1-123-356-00	ELECT	10MF	20%	16V
C005	1-123-356-00	ELECT	10MF	20%	16V
C006	1-123-356-00	ELECT	10MF	20%	16V
C007	1-101-004-00	CERAMIC	0.01MF		50V
C008	1-123-332-00	ELECT	47MF	20%	16V
C009	1-123-311-00	ELECT	1000MF	20%	10V
C010	1-123-356-00	ELECT	10MF	20%	16V
C011	1-123-356-00	ELECT	10MF	20%	25V
C013	1-123-306-00	ELECT	47MF	20%	10V
C014	1-123-381-00	ELECT	2.2MF	20%	50V
C015	1-123-306-00	ELECT	47MF	20%	10V
C016	1-108-589-00	MYLAR	0.027MF	5%	50V
C017	1-101-004-00	CERAMIC	0.01MF		50V
C018	1-123-306-00	ELECT	47MF	20%	10V
C019	1-101-004-00	CERAMIC	0.01MF		50V
C020	1-101-004-00	CERAMIC	0.01MF		50V
C021	1-101-004-00	CERAMIC	0.01MF		50V
C022	1-101-004-00	CERAMIC	0.01MF		50V
C023	1-101-882-00	CERAMIC	51PF	5%	50V
C024	1-130-047-00	FILM	180PF	5%	50V
C025	1-106-172-00	MYLAR	0.001MF	5%	50V
C026	1-101-059-00	CERAMIC	510PF	5%	50V
C027	1-161-045-00	CERAMIC	0.0033MF	10%	25V
C028	1-106-172-00	MYLAR	0.001MF	5%	50V
C029	1-123-382-00	ELECT	3.3MF	20%	50V
C031	1-101-004-00	CERAMIC	0.01MF		50V
C032	1-102-816-00	CERAMIC	120PF	5%	50V
C033	1-101-004-00	CERAMIC	0.01MF		50V
C034	1-101-004-00	CERAMIC	0.01MF		50V
C035	1-102-816-00	CERAMIC	120PF	5%	50V
C036	1-101-882-00	CERAMIC	51PF	5%	50V
C037	1-101-004-00	CERAMIC	0.01MF		50V
C038	1-101-004-00	CERAMIC	0.01MF		50V
C039	1-101-004-00	CERAMIC	0.01MF		50V
C040	1-101-004-00	CERAMIC	0.01MF		50V
C041	1-161-043-00	CERAMIC	0.0022MF	10%	25V
C042	1-102-516-00	CERAMIC	27PF	5%	50V
C043	1-101-004-00	CERAMIC	0.01MF		50V
C044	1-101-004-00	CERAMIC	0.01MF		50V
C045	1-102-523-00	CERAMIC	56PF	5%	50V
C046	1-101-004-00	CERAMIC	0.01MF		50V
C047	1-101-004-00	CERAMIC	0.01MF		50V
C048	1-101-004-00	CERAMIC	0.01MF		50V
C049	1-101-004-00	CERAMIC	0.01MF		50V
C050	1-102-865-00	CERAMIC	8PF	0.5PF	50V
C051	1-102-525-00	CERAMIC	68PF	5%	50V
C052	1-102-525-00	CERAMIC	68PF	5%	50V
C053	1-123-379-00	ELECT	0.47MF	20%	50V
C054	1-161-040-00	CERAMIC	0.0012MF	10%	25V
C055	1-123-380-00	ELECT	1MF	20%	50V
C056	1-102-962-00	CERAMIC	30PF	5%	50V
C057	1-102-981-00	CERAMIC	300PF	5%	50V
C058	1-123-306-00	ELECT	47MF	20%	10V
C059	1-101-004-00	CERAMIC	0.01MF		50V
C060	1-108-579-00	MYLAR	0.01MF	5%	50V
C061	1-123-382-00	ELECT	3.3MF	20%	50V
C062	1-123-306-00	ELECT	47MF	20%	10V
C063	1-101-004-00	CERAMIC	0.01MF		50V
C064	1-102-521-00	CERAMIC	43PF	5%	50V
C065	1-102-971-00	CERAMIC	82PF	5%	50V
C066	1-102-518-00	CERAMIC	33PF	5%	50V
C067	1-161-025-00	CERAMIC	0.1MF	10%	25V
C068	1-101-004-00	CERAMIC	0.01MF		50V
C069	1-102-962-00	CERAMIC	30PF	5%	50V
C070	1-101-004-00	CERAMIC	0.01MF		50V
C071	1-123-380-00	ELECT	1MF	20%	50V
C072	1-101-004-00	CERAMIC	0.01MF		50V
C073	1-102-525-00	CERAMIC	68PF	5%	50V
C074	1-102-525-00	CERAMIC	68PF	5%	50V
C075	1-101-004-00	CERAMIC	0.01MF		50V
C076	1-102-951-00	CERAMIC	15PF	5%	50V
C077	1-123-330-00	ELECT	22MF	20%	16V
C078	1-123-330-00	ELECT	22MF	20%	16V
C080	1-101-004-00	CERAMIC	0.01MF		50V
C082	1-161-024-00	CERAMIC	0.082MF	10%	25V
C083	1-102-977-00	CERAMIC	200PF	5%	50V
C084	1-123-369-00	ELECT	4.7MF	20%	25V
C085	1-101-004-00	CERAMIC	0.01MF		50V
C086	1-108-557-00	MYLAR	0.0012MF	5%	50V
C087	1-161-057-00	CERAMIC	0.033MF	10%	25V
C088	1-101-361-00	CERAMIC	150PF	5%	50V
C092	1-101-004-00	CERAMIC	0.01MF		50V
C093	1-101-006-00	CERAMIC	0.047MF		50V
C095	1-102-976-00	CERAMIC	180PF	5%	50V
C096	1-102-824-00	CERAMIC	470PF	5%	50V
C097	1-102-823-00	CERAMIC	430PF	5%	50V
C098	1-102-820-00	CERAMIC	330PF	5%	50V
C099	1-102-851-00	CERAMIC	15PF	5%	50V
C100	1-161-025-00	CERAMIC	0.1MF	10%	25V
C101	1-108-595-00	MYLAR	0.047MF	5%	50V
C102	1-161-043-00	CERAMIC	0.0022MF	10%	25V
C103	1-106-172-00	MYLAR	0.001MF	5%	50V
C104	1-102-977-00	CERAMIC	200PF	5%	50V
C105	1-102-973-00	CERAMIC	100PF	5%	50V
C106	1-123-356-00	ELECT	10MF	20%	16V
C107	1-161-025-00	CERAMIC	0.1MF	10%	25V
C108	1-101-004-00	CERAMIC	0.01MF		50V
C109	1-101-004-00	CERAMIC	0.01MF		50V
C111	1-101-882-00	CERAMIC	51PF	5%	50V
C112	1-101-004-00	CERAMIC	0.01MF		50V
C113	1-101-006-00	CERAMIC	0.047MF		50V
C114	1-101-880-00	CERAMIC	47PF	5%	50V
C116	1-101-004-00	CERAMIC	0.01MF		50V
C117	1-101-361-00	CERAMIC	150PF	5%	50V
C118	1-101-004-00	CERAMIC	0.01MF		50V
C119	1-123-306-00	ELECT	47MF	20%	10V
C120	1-101-004-00	CERAMIC	0.01MF		50V
C121	1-101-004-00	CERAMIC	0.01MF		50V
C122	1-101-004-00	CERAMIC	0.01MF		50V
C123	1-101-004-00	CERAMIC	0.01MF		50V
C124	1-102-948-00	CERAMIC	11PF	5%	50V
C125	1-123-330-00	ELECT	22MF	20%	16V
C127	1-123-318-00	ELECT	33MF	20%	16V
C128	1-123-330-00	ELECT	22MF	20%	16V
C129	1-123-330-00	ELECT	22MF	20%	16V
C130	1-123-356-00	ELECT	10MF	20%	16V
C131	1-123-380-00	ELECT	1MF	20%	50V
C132	1-123-369-00	ELECT	4.7MF	20%	25V
C133	1-102-851-00	CERAMIC	15PF	5%	50V
C134	1-102-821-00	CERAMIC	360PF	5%	50V
C135	1-102-823-00	CERAMIC	430PF	5%	50V
C136	1-102-976-00	CERAMIC	180PF	5%	50V
C137	1-102-513-00	CERAMIC	18PF	5%	50V
C138	1-102-529-00	CERAMIC	100PF	5%	50V
C139	1-102-529-00	CERAMIC	100PF	5%	50V
C140	1-102-519-00	CERAMIC	36PF	5%	50V
C141	1-102-529-00	CERAMIC	100PF	5%	50V
C142	1-123-369-00	ELECT	4.7MF	20%	25V
C144	1-102-511-00	CERAMIC	13PF	5%	50V
C145	1-102-522-00	CERAMIC	51PF	5%	50V
C146	1-102-522-00	CERAMIC	51PF	5%	50V
C147	1-102-511-00	CERAMIC	13PF	5%	50V
C148	1-101-006-00	CERAMIC	0.047MF		50V
C155	1-101-004-00	CERAMIC	0.01MF		50V
C156	1-101-004-00	CERAMIC	0.01MF		50V
C157	1-102-981-00	CERAMIC	300PF	5%	50V
C158	1-102-948-00	CERAMIC	11PF	5%	50V
C159	1-102-822-00	CERAMIC	390PF	5%	50V
C178	1-123-330-00	ELECT	22MF	20%	16V
C179	1-123-356-00	ELECT	10MF	20%	16V
C180	1-123-332-00	ELECT	47MF	20%	16V
C181	1-106-186-00	MYLAR	0.0039MF	5%	50V
C182	1-123-380-00	ELECT	1MF	20%	50V
C183	1-101-006-00	CERAMIC	0.047MF		50V
C184	1-123-332-00	ELECT	47MF	20%	16V
C185	1-123-333-00	ELECT	100MF	20%	16V
C186	1-101-004-00	CERAMIC	0.01MF		50V
C187	1-123-330-00	ELECT	22MF	20%	16V
C188	1-161-025-00	CERAMIC	0.1MF	10%	25V
C189	1-123-356-00	ELECT	10MF	20%	16V
C190	1-123-311-00	ELECT	1000MF	20%	10V
C191	1-101-004-00	CERAMIC	0.01MF		50V
C192	1-123-369-00	ELECT	4.7MF	20%	25V
C196	1-123-380-00	ELECT	1MF	20%	50V
C197	1-123-356-00	ELECT	10MF	20%	16V
C198	1-102-980-00	CERAMIC	270PF	5%	50V
C200	1-101-004-00	CERAMIC	0.01MF		50V
C201	1-123-356-00	ELECT	10MF	20%	16V
C202	1-101-004-00	CERAMIC	0.01MF		50V
C203	1-101-004-00	CERAMIC	0.01MF		50V
C204	1-123-369-00	ELECT	4.7MF	20%	25V
C206	1-101-004-00	CERAMIC	0.01MF		50V
C207	1-161-025-00	CERAMIC	0.1MF	10%	25V
C208	1-123-356-00	ELECT	10MF	20%	16V
C211	1-123-356-00	ELECT	10MF	20%	16V
C212	1-123-333-00	ELECT	100MF	20%	16V
C214	1-123-356-00	ELECT	10MF	20%	16V
C215	1-123-330-00	ELECT	22MF	20%	16V
C217	1-161-025-00	CERAMIC	0.1MF	10%	25V
C219	1-123-356-00	ELECT	10MF	20%	16V
C220	1-161-059-00	CERAMIC	0.047MF	10%	25V
C225	1-101-004-00	CERAMIC	0.01MF		50V
C230	1-124-475-11	ELECT	470MF	20%	16V
C241	1-161-025-00	CERAMIC	0.1MF	10%	25V
C243	1-161-025-00	CERAMIC	0.1MF	10%	25V
C246	1-161-025-00	CERAMIC	0.1MF	10%	25V
C247	1-123-333-00	ELECT	100MF	20%	16V
C248	1-161-059-00	CERAMIC	0.047MF	10%	25V
C251	1-161-059-00	CERAMIC	0.047MF	10%	25V
C252	1-101-081-00	CERAMIC	130PF	5%	50V
C253	1-123-356-00	ELECT	10MF	20%	16V
C257	1-161-059-00	CERAMIC	0.047MF	10%	25V
C258	1-161-059-00	CERAMIC	0.047MF	10%	25V
C270	1-161-059-00	CERAMIC	0.047MF	10%	25V
C274	1-102-518-00	CERAMIC	33P	5%	50V
C401	1-123-381-00	ELECT	2.2MF	20%	50V
C402	1-101-001-00	CERAMIC	0.001MF		50V
C403	1-101-001-00	CERAMIC	0.001MF		50V
C404	1-101-004-00	CERAMIC	0.01MF		50V
C405	1-123-330-00	ELECT	22MF	20%	16V
C406	1-123-330-00	ELECT	22MF	20%	16V
C407	1-102-962-00	CERAMIC	30PF	5%	50V
C408	1-101-888-00	CERAMIC	68PF	5%	50V
C409	1-123-381-00	ELECT	2.2MF	20%	50V
C410	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C411	1-101-005-00	CERAMIC	0.022MF		50V
C412	1-123-318-00	ELECT	33MF	20%	16V
C414	1-123-318-00	ELECT	33MF	20%	16V
C415	1-123-356-00	ELECT	10MF	20%	16V
C416	1-102-948-00	CERAMIC	11PF	5%	50V
C417	1-102-948-00	CERAMIC	11PF	5%	50V
C418	1-102-965-00	CERAMIC	39PF	5%	50V
C419	1-123-356-00	ELECT	10MF	20%	16V
C420	1-123-369-00	ELECT	4.7MF	20%	25V
C421	1-101-006-00	CERAMIC	0.047MF		50V
C501	1-101-004-00	CERAMIC	0.01MF		50V
C502	1-101-004-00	CERAMIC	0.01MF		50V
C503	1-101-004-00	CERAMIC	0.01MF		50V
C504	1-101-005-00	CERAMIC	0.022MF		50V
C505	1-102-822-00	CERAMIC	390PF	5%	50V
C506	1-101-006-00	CERAMIC	0.047MF		50V
C507	1-123-318-00	ELECT	33MF	20%	16V

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When indicating parts by reference number, please include the board name.

When indicating parts by reference number, please include the board name.

FILTER

Ref.No	Part No.	Description	Remark
CF001	1-527-998-00	FILTER, CERAMIC	
CF002	1-527-875-00	FILTER, CERAMIC	
CF003	1-527-849-00	FILTER, CERAMIC	

CONNECTOR

Ref.No	Part No.	Description	Remark
CN001 ●:	1-564-035-11	PIN, CONNECTOR 10P	
CN003 ●:	1-560-891-00	PIN, CONNECTOR 3P	
CN004 ●:	1-560-895-00	PIN, CONNECTOR 7P	
CN005 ●:	1-560-893-00	PIN, CONNECTOR 5P	
CN006 ●:	1-560-893-00	PIN, CONNECTOR 5P	
CN007 ●:	1-560-898-00	PIN, CONNECTOR 10P	
CN008 ●:	1-560-895-00	PIN, CONNECTOR 7P	
CN009	1-507-840-00	JACK, MINIATURE	
CN010	1-562-121-00	CONNECTOR, DIN 6P	

TRIMMER

Ref.No	Part No.	Description	Remark
CV001	1-141-275-00	CAP, TRIMMER	

DIODE

Ref.No	Part No.	Description	Remark
D001	=>8-719-911-19	DIODE 1SS119	
D002	=>8-719-911-19	DIODE 1SS119	
D005	=>8-719-911-19	DIODE 1SS119	
D006	8-719-000-06	DIODE MC921	
D009	8-719-000-06	DIODE MC921	
D011	=>8-719-911-19	DIODE 1SS119	
D012	=>8-719-911-19	DIODE 1SS119	
D013	=>8-719-911-19	DIODE 1SS119	
D014	=>8-719-911-19	DIODE 1SS119	
D015	=>8-719-911-19	DIODE 1SS119	
D016	8-719-000-12	DIODE MC931	
D017	=>8-719-911-19	DIODE 1SS119	
D018	=>8-719-911-19	DIODE 1SS119	
D019	=>8-719-911-19	DIODE 1SS119	
D020	=>8-719-911-19	DIODE 1SS119	
D021	=>8-719-911-19	DIODE 1SS119	
D022	=>8-719-911-19	DIODE 1SS119	
D023	=>8-719-911-19	DIODE 1SS119	
D025	=>8-719-911-19	DIODE 1SS119	
D027	8-719-000-06	DIODE MC921	
D029	8-719-100-56	DIODE RD10E-B1	
D030	=>8-719-911-19	DIODE 1SS119	
D031	=>8-719-911-19	DIODE 1SS119	
D033	=>8-719-911-19	DIODE 1SS119	
D036	=>8-719-911-19	DIODE 1SS119	

DELAY LINE

Ref.No	Part No.	Description	Remark
DL001	1-415-313-00	DELAY LINE (1H)	
DL401	1-415-352-11	DELAY LINE, 1H	
DL501	1-415-282-00	DELAY LINE	

IC

Ref.No	Part No.	Description	Remark
IC001	8-759-909-20	IC BA634	
IC002	8-759-904-95	IC BA7007	
IC003	8-759-201-68	IC CX10023	
IC004	8-759-208-94	IC CX894	
IC005	8-752-006-10	IC CX20061	
IC006	8-759-202-00	IC CX10021A-NP	
IC009	8-759-101-62	IC CX20043	
IC011	8-752-006-10	IC CX20061	
IC012	8-759-979-26	IC CX7926	
IC401	=>8-758-662-00	IC CX866B	

COIL

Ref.No	Part No.	Description	Remark
L001	1-407-499-00	MICRO INDUCTOR 3.9MMH	
L002	1-407-496-00	MICRO INDUCTOR 2.2MMH	
L003	1-408-408-00	MICRO INDUCTOR 8.2UH	
L004	1-408-406-00	MICRO INDUCTOR 5.6UH	
L005	1-408-415-00	MICRO INDUCTOR 33UH	
L006	1-408-428-00	MICRO INDUCTOR 390UH	
L007	1-408-427-00	MICRO INDUCTOR 330UH	
L008	1-408-421-00	MICRO INDUCTOR 100UH	
L010	1-408-427-00	MICRO INDUCTOR 330UH	
L011	1-408-423-00	MICRO INDUCTOR 150UH	
L012	1-408-409-00	MICRO INDUCTOR 10UH	
L014	1-408-422-00	MICRO INDUCTOR 120UH	
L015	1-408-419-00	MICRO INDUCTOR 68UH	
L016	1-408-413-00	MICRO INDUCTOR 22UH	
L017	1-408-423-00	MICRO INDUCTOR 150UH	
L018	1-408-419-00	MICRO INDUCTOR 68UH	
L019	1-408-416-00	MICRO INDUCTOR 39UH	
L020	1-408-416-00	MICRO INDUCTOR 39UH	
L021	1-408-422-00	MICRO INDUCTOR 120UH	
L022	1-408-424-00	MICRO INDUCTOR 180UH	
L023	1-408-422-00	MICRO INDUCTOR 120UH	
L026	1-408-416-00	MICRO INDUCTOR 39UH	
L036	1-408-429-00	MICRO INDUCTOR 470UH	
L040	1-408-575-00	MICRO INDUCTOR 100UH	
L041	1-408-424-00	MICRO INDUCTOR 180UH	
L042	1-407-163-XX	MICRO INDUCTOR 33UH	
L401	1-408-397-00	MICRO INDUCTOR 1UH	
L402	1-408-397-00	MICRO INDUCTOR 1UH	
L501	1-408-408-00	MICRO INDUCTOR 8.2UH	
L502	1-408-423-00	MICRO INDUCTOR 150UH	

FILTER LOW PASS

Ref.No	Part No.	Description	Remark
LPF001	1-235-097-00	FILTER, LOW PASS	

VARIABLE COIL

Ref.No	Part No.	Description	Remark
LV001	1-407-291-00	MICRO INDUCTOR 15MMH	
LV002	1-407-573-00	COIL, VARIABLE 47UH	
LV003	1-407-571-00	COIL, VARIABLE 22UH	
LV501	1-407-569-00	COIL, VARIABLE 10UH	

IC LINK

Ref.No	Part No.	Description	Remark
PS001⚠	1-532-685-11	LINK, IC (ICP-N20)	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

TRANSISTOR

Ref.No	Part No.	Description	Remark
Q001	8-729-900-36	TRANSISTOR DTC124ES	
Q002	=>8-729-245-83	TRANSISTOR 2SC2458	
Q003	8-729-600-12	TRANSISTOR 2SK108	
Q004	=>8-729-245-83	TRANSISTOR 2SC2458	
Q005	8-729-600-12	TRANSISTOR 2SK108	
Q007	=>8-729-245-83	TRANSISTOR 2SC2458	
Q010	8-729-177-32	TRANSISTOR 2SD773	
Q011	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q014	8-729-113-33	TRANSISTOR 2SB733-4	
Q015	8-729-900-80	TRANSISTOR DTC114ES	
Q016	=>8-729-245-83	TRANSISTOR 2SC2458	
Q019	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q020	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q021	=>8-729-245-83	TRANSISTOR 2SC2458	
Q022	=>8-729-245-83	TRANSISTOR 2SC2458	
Q023	=>8-729-245-83	TRANSISTOR 2SC2458	
Q024	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q025	=>8-729-245-83	TRANSISTOR 2SC2458	
Q026	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q027	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q028	=>8-729-245-83	TRANSISTOR 2SC2458	
Q029	=>8-729-245-83	TRANSISTOR 2SC2458	
Q030	=>8-729-245-83	TRANSISTOR 2SC2458	
Q031	=>8-729-245-83	TRANSISTOR 2SC2458	
Q032	=>8-729-245-83	TRANSISTOR 2SC2458	
Q033	=>8-729-245-83	TRANSISTOR 2SC2458	
Q034	=>8-729-245-83	TRANSISTOR 2SC2458	
Q035	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q036	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q037	8-729-384-46	TRANSISTOR 2SA844-C	
Q038	8-729-384-46	TRANSISTOR 2SA844-C	
Q039	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q040	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q041	8-729-384-46	TRANSISTOR 2SA844-C	
Q042	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q043	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q044	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q045	8-729-384-46	TRANSISTOR 2SA844-C	
Q047	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q048	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q049	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q050	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q051	8-729-384-46	TRANSISTOR 2SA844-C	
Q052	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q053	8-729-384-46	TRANSISTOR 2SA844-C	
Q054	8-729-384-46	TRANSISTOR 2SA844-C	
Q055	8-729-384-46	TRANSISTOR 2SA844-C	
Q056	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q060	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q061	=>8-729-245-83	TRANSISTOR 2SC2458	
Q062	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q063	=>8-729-245-83	TRANSISTOR 2SC2458	
Q064	=>8-729-245-83	TRANSISTOR 2SC2458	
Q065	=>8-729-245-83	TRANSISTOR 2SC2458	
Q066	⚠8-729-117-54	TRANSISTOR 2SA1175	
Q067	=>8-729-245-83	TRANSISTOR 2SC2458	
Q068	=>8-729-245-83	TRANSISTOR 2SC2458	
Q069	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q070	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q071	=>8-729-245-83	TRANSISTOR 2SC2458	
Q072	=>8-729-245-83	TRANSISTOR 2SC2458	
Q074	=>8-729-245-83	TRANSISTOR 2SC2458	
Q075	8-729-900-85	TRANSISTOR DTC144WS	
Q100	8-729-900-85	TRANSISTOR DTC144WS	
Q101	8-729-900-89	TRANSISTOR DTC144ES	
Q102	8-729-900-65	TRANSISTOR DTA144ES	
Q103	=>8-729-245-83	TRANSISTOR 2SC2458	
Q401	=>8-729-245-83	TRANSISTOR 2SC2458	
Q501	=>8-729-245-83	TRANSISTOR 2SC2458	
Q502	=>8-729-245-83	TRANSISTOR 2SC2458	
Q503	=>8-729-245-83	TRANSISTOR 2SC2458	
Q504	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

Ref.No	Part No.	Description	Remark
R001	1-247-838-00	CARBON 2K 5% 1/6W	
R003	1-247-831-00	CARBON 1K 5% 1/6W	
R005	1-247-827-00	CARBON 680 5% 1/6W	
R006	1-247-879-00	CARBON 100K 5% 1/6W	
R007	1-247-871-00	CARBON 47K 5% 1/6W	
R008	1-247-879-00	CARBON 100K 5% 1/6W	
R009	1-247-879-00	CARBON 100K 5% 1/6W	
R010	1-247-814-00	CARBON 200 5% 1/6W	
R011	1-247-871-00	CARBON 47K 5% 1/6W	
R012	1-247-827-00	CARBON 680 5% 1/6W	
R013	1-247-879-00	CARBON 100K 5% 1/6W	
R014	1-247-871-00	CARBON 47K 5% 1/6W	
R015	1-247-879-00	CARBON 100K 5% 1/6W	
R016	1-247-879-00	CARBON 100K 5% 1/6W	
R017	1-247-814-00	CARBON 200 5% 1/6W	
R018	1-247-871-00	CARBON 47K 5% 1/6W	
R022	1-247-847-00	CARBON 4.7K 5% 1/6W	
R026	1-247-867-00	CARBON 33K 5% 1/6W	
R027	1-247-867-00	CARBON 33K 5% 1/6W	
R028	1-247-877-00	CARBON 82K 5% 1/6W	
R031	⚠1-212-857-00	FUSIBLE 10 5% 1/4W	F
R032	1-247-831-00	CARBON 1K 5% 1/6W	
R035	1-247-859-00	CARBON 15K 5% 1/6W	
R037	1-247-869-00	CARBON 39K 5% 1/6W	
R038	1-247-837-00	CARBON 1.8K 5% 1/6W	
R039	⚠1-212-857-00	FUSIBLE 10 5% 1/4W	F
R040	⚠1-212-849-00	FUSIBLE 4.7 5% 1/4W	F
R041	1-247-838-00	CARBON 2K 5% 1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R046	1-247-835-00	CARBON	1.5K	5%	1/6W	
R047	1-247-879-00	CARBON	100K	5%	1/6W	
R048	1-247-831-00	CARBON	1K	5%	1/6W	
R049	1-247-863-00	CARBON	22K	5%	1/6W	
R050	1-247-853-00	CARBON	8.2K	5%	1/6W	
R051	1-247-821-00	CARBON	390	5%	1/6W	
R052	1-247-819-00	CARBON	330	5%	1/6W	
R053	1-247-843-00	CARBON	3.3K	5%	1/6W	
R054	1-247-847-00	CARBON	4.7K	5%	1/6W	
R055	1-247-849-00	CARBON	5.6K	5%	1/6W	
R056	1-247-867-00	CARBON	33K	5%	1/6W	
R058	1-247-855-00	CARBON	10K	5%	1/6W	
R059	1-247-859-00	CARBON	15K	5%	1/6W	
R060	1-247-867-00	CARBON	33K	5%	1/6W	
R061	1-247-855-00	CARBON	10K	5%	1/6W	
R062	1-247-855-00	CARBON	10K	5%	1/6W	
R063	1-247-841-00	CARBON	2.7K	5%	1/6W	
R064	1-247-848-00	CARBON	5.1K	5%	1/6W	
R065	1-247-889-00	CARBON	270K	5%	1/6W	
R066	1-247-870-00	CARBON	43K	5%	1/6W	
R067	1-247-862-00	CARBON	20K	5%	1/6W	
R068	1-247-838-00	CARBON	2K	5%	1/6W	
R069	1-247-831-00	CARBON	1K	5%	1/6W	
R070	1-247-831-00	CARBON	1K	5%	1/6W	
R071	1-247-855-00	CARBON	10K	5%	1/6W	
R072	1-247-841-00	CARBON	2.7K	5%	1/6W	
R073	1-247-831-00	CARBON	1K	5%	1/6W	
R074	1-247-831-00	CARBON	1K	5%	1/6W	
R075	1-247-815-00	CARBON	220	5%	1/6W	
R076	1-247-855-00	CARBON	10K	5%	1/6W	
R077	1-247-855-00	CARBON	10K	5%	1/6W	
R078	1-247-867-00	CARBON	33K	5%	1/6W	
R079	1-247-855-00	CARBON	10K	5%	1/6W	
R080	1-247-853-00	CARBON	8.2K	5%	1/6W	
R081	1-247-843-00	CARBON	3.3K	5%	1/6W	
R082	1-247-871-00	CARBON	47K	5%	1/6W	
R083	1-247-825-00	CARBON	560	5%	1/6W	
R084	1-247-831-00	CARBON	1K	5%	1/6W	
R085	1-247-803-00	CARBON	68	5%	1/6W	
R086	1-247-825-00	CARBON	560	5%	1/6W	
R087	1-247-825-00	CARBON	560	5%	1/6W	
R088	1-247-801-00	CARBON	56	5%	1/6W	
R091	1-247-824-00	CARBON	510	5%	1/6W	
R092	1-247-791-00	CARBON	22	5%	1/6W	
R093	1-247-806-00	CARBON	91	5%	1/6W	
R094	1-247-869-00	CARBON	39K	5%	1/6W	
R095	1-247-872-00	CARBON	51K	5%	1/6W	
R096	1-247-879-00	CARBON	100K	5%	1/6W	
R097	1-247-882-00	CARBON	130K	5%	1/6W	
R098	1-247-890-00	CARBON	300K	5%	1/6W	
R100	1-247-869-00	CARBON	39K	5%	1/6W	
R101	1-247-864-00	CARBON	24K	5%	1/6W	
R103	1-247-831-00	CARBON	1K	5%	1/6W	
R104	1-247-839-00	CARBON	2.2K	5%	1/6W	
R105	1-247-829-00	CARBON	820	5%	1/6W	
R106	1-247-831-00	CARBON	1K	5%	1/6W	
R107	1-247-824-00	CARBON	510	5%	1/6W	
R108	1-247-843-00	CARBON	3.3K	5%	1/6W	
R109	1-247-867-00	CARBON	33K	5%	1/6W	
R111	1-247-846-00	CARBON	4.3K	5%	1/6W	
R112	1-247-854-00	CARBON	9.1K	5%	1/6W	
R113	1-247-843-00	CARBON	3.3K	5%	1/6W	
R114	1-247-828-00	CARBON	750	5%	1/6W	
R115	1-247-879-00	CARBON	100K	5%	1/6W	
R116	1-247-853-00	CARBON	8.2K	5%	1/6W	
R117	1-247-846-00	CARBON	4.3K	5%	1/6W	
R118	1-247-867-00	CARBON	33K	5%	1/6W	
R119	1-247-855-00	CARBON	10K	5%	1/6W	
R120	1-247-831-00	CARBON	1K	5%	1/6W	
R121	1-247-831-00	CARBON	1K	5%	1/6W	
R122	1-247-839-00	CARBON	2.2K	5%	1/6W	
R123	1-247-841-00	CARBON	2.7K	5%	1/6W	
R124	1-247-819-00	CARBON	330	5%	1/6W	
R125	1-247-831-00	CARBON	1K	5%	1/6W	
R126	1-247-831-00	CARBON	1K	5%	1/6W	
R127	1-247-835-00	CARBON	1.5K	5%	1/6W	
R128	1-247-831-00	CARBON	1K	5%	1/6W	
R129	1-247-867-00	CARBON	33K	5%	1/6W	
R130	1-247-842-00	CARBON	3K	5%	1/6W	
R131	1-247-841-00	CARBON	2.7K	5%	1/6W	
R132	1-247-887-00	CARBON	220K	5%	1/6W	
R133	1-247-807-00	CARBON	100	5%	1/6W	
R134	1-247-851-00	CARBON	6.8K	5%	1/6W	
R135	1-247-883-00	CARBON	150K	5%	1/6W	
R136	1-247-879-00	CARBON	100K	5%	1/6W	
R137	1-247-857-00	CARBON	12K	5%	1/6W	
R138	1-247-861-00	CARBON	18K	5%	1/6W	
R139	1-247-841-00	CARBON	2.7K	5%	1/6W	
R140	1-247-867-00	CARBON	33K	5%	1/6W	
R141	1-247-831-00	CARBON	1K	5%	1/6W	
R142	1-247-842-00	CARBON	3K	5%	1/6W	
R143	1-247-855-00	CARBON	10K	5%	1/6W	
R144	1-247-824-00	CARBON	510	5%	1/6W	
R145	1-247-838-00	CARBON	2K	5%	1/6W	
R146	1-247-829-00	CARBON	820	5%	1/6W	
R147	1-247-855-00	CARBON	10K	5%	1/6W	
R148	1-247-831-00	CARBON	1K	5%	1/6W	
R149	1-247-819-00	CARBON	330	5%	1/6W	
R150	1-247-863-00	CARBON	22K	5%	1/6W	
R151	1-247-812-00	CARBON	160	5%	1/6W	
R152	1-247-829-00	CARBON	820	5%	1/6W	
R153	1-247-863-00	CARBON	22K	5%	1/6W	
R154	1-247-821-00	CARBON	390	5%	1/6W	
R155	1-247-839-00	CARBON	2.2K	5%	1/6W	
R156	1-247-839-00	CARBON	2.2K	5%	1/6W	
R157	1-247-837-00	CARBON	1.8K	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R158	1-247-817-00	CARBON	270	5%	1/6W	
R159	1-247-810-00	CARBON	130	5%	1/6W	
R160	1-247-832-00	CARBON	1.1K	5%	1/6W	
R161	1-247-855-00	CARBON	10K	5%	1/6W	
R162	1-247-835-00	CARBON	1.5K	5%	1/6W	
R163	1-247-842-00	CARBON	3K	5%	1/6W	
R164	1-247-830-00	CARBON	910	5%	1/6W	
R165	1-247-834-00	CARBON	1.3K	5%	1/6W	
R166	1-247-818-00	CARBON	300	5%	1/6W	
R167	1-247-849-00	CARBON	5.6K	5%	1/6W	
R168	1-247-836-00	CARBON	1.6K	5%	1/6W	
R169	1-247-840-00	CARBON	2.4K	5%	1/6W	
R170	1-247-804-00	CARBON	75	5%	1/6W	
R171	1-247-901-00	CARBON	820K	5%	1/6W	
R172	1-247-857-00	CARBON	12K	5%	1/6W	
R173	1-247-861-00	CARBON	18K	5%	1/6W	
R174	1-247-839-00	CARBON	2.2K	5%	1/6W	
R175	1-247-831-00	CARBON	1K	5%	1/6W	
R176	1-247-839-00	CARBON	2.2K	5%	1/6W	
R178	1-247-839-00	CARBON	2.2K	5%	1/6W	
R179	1-247-843-00	CARBON	3.3K	5%	1/6W	
R180	1-247-835-00	CARBON	1.5K	5%	1/6W	
R181	1-247-835-00	CARBON	1.5K	5%	1/6W	
R185	1-247-843-00	CARBON	3.3K	5%	1/6W	
R186	1-247-830-00	CARBON	910	5%	1/6W	
R187	1-247-831-00	CARBON	1K	5%	1/6W	
R188	1-247-839-00	CARBON	2.2K	5%	1/6W	
R189	1-247-834-00	CARBON	1.3K	5%	1/6W	
R190	1-247-834-00	CARBON	1.3K	5%	1/6W	
R191	1-247-831-00	CARBON	1K	5%	1/6W	
R192	1-247-831-00	CARBON	1K	5%	1/6W	
R193	1-247-855-00	CARBON	10K	5%	1/6W	
R194	1-247-819-00	CARBON	330	5%	1/6W	
R195	1-247-812-00	CARBON	160	5%	1/6W	
R196	1-247-863-00	CARBON	22K	5%	1/6W	
R197	1-247-863-00	CARBON	22K	5%	1/6W	
R198	1-247-829-00	CARBON	820	5%	1/6W	
R199	1-247-821-00	CARBON	390	5%	1/6W	
R200	1-247-839-00	CARBON	2.2K	5%	1/6W	
R201	1-247-837-00	CARBON	1.8K	5%	1/6W	
R202	1-247-831-00	CARBON	1K	5%	1/6W	
R203	1-247-815-00	CARBON	220	5%	1/6W	
R204	1-247-811-00	CARBON	150	5%	1/6W	
R205	1-247-811-00	CARBON	150	5%	1/6W	
R206	1-247-834-00	CARBON	1.3K	5%	1/6W	
R207	1-247-874-00	CARBON	62K	5%	1/6W	
R208	1-247-874-00	CARBON	62K	5%	1/6W	
R209	1-247-833-00	CARBON	1.2K	5%	1/6W	
R210	1-247-824-00	CARBON	510	5%	1/6W	
R211	1-247-831-00	CARBON	1K	5%	1/6W	
R212	1-247-824-00	CARBON	510	5%	1/6W	
R213	1-247-829-00	CARBON	820	5%	1/6W	
R214	1-247-831-00	CARBON	1K	5%	1/6W	

Ref.No	Part No.	Description				Remark
R215	1-247-831-00	CARBON	1K	5%	1/6W	
R216	1-247-832-00	CARBON	1.1K	5%	1/6W	
R217	1-247-831-00	CARBON	1K	5%	1/6W	
R218	1-247-831-00	CARBON	1K	5%	1/6W	
R219	1-247-866-00	CARBON	30K	5%	1/6W	
R220	1-247-874-00	CARBON	62K	5%	1/6W	
R221	1-247-849-00	CARBON	5.6K	5%	1/6W	
R222	1-247-837-00	CARBON	1.8K	5%	1/6W	
R223	1-247-837-00	CARBON	1.8K	5%	1/6W	
R231	1-247-867-00	CARBON	33K	5%	1/6W	
R235	1-247-831-00	CARBON	1K	5%	1/6W	
R236	1-247-853-00	CARBON	8.2K	5%	1/6W	
R238	1-247-858-00	CARBON	13K	5%	1/6W	
R239	1-247-855-00	CARBON	10K	5%	1/6W	
R240	1-247-839-00	CARBON	2.2K	5%	1/6W	
R241	1-247-804-00	CARBON	75	5%	1/6W	
R242	1-247-879-00	CARBON	100K	5%	1/6W	
R243	1-247-855-00	CARBON	10K	5%	1/6W	
R244	1-247-851-00	CARBON	6.8K	5%	1/6W	
R245	1-247-879-00	CARBON	100K	5%	1/6W	
R246	1-247-871-00	CARBON	47K	5%	1/6W	
R247	1-247-871-00	CARBON	47K	5%	1/6W	
R248	1-247-818-00	CARBON	300	5%	1/6W	
R249	1-247-811-00	CARBON	150	5%	1/6W	
R250	1-247-808-00	CARBON	110	5%	1/6W	
R251	1-247-838-00	CARBON	2K	5%	1/6W	
R252	1-247-803-00	CARBON	68	5%	1/6W	
R253	1-247-831-00	CARBON	1K	5%	1/6W	
R254	1-247-855-00	CARBON	10K	5%	1/6W	
R255	1-247-858-00	CARBON	13K	5%	1/6W	
R256	1-247-843-00	CARBON	3.3K	5%	1/6W	
R257	1-247-835-00	CARBON	1.5K	5%	1/6W	
R258	1-247-852-00	CARBON	7.5K	5%	1/6W	
R259	1-247-831-00	CARBON	1K	5%	1/6W	
R260	1-247-841-00	CARBON	2.7K	5%	1/6W	
R261	1-247-863-00	CARBON	22K	5%	1/6W	
R262	1-247-859-00	CARBON	15K	5%	1/6W	
R274	1-247-883-00	CARBON	150K	5%	1/6W	
R275	1-247-871-00	CARBON	47K	5%	1/6W	
R276	1-247-849-00	CARBON	5.6K	5%	1/6W	
R277	1-247-855-00	CARBON	10K	5%	1/6W	
R281	1-247-890-00	CARBON	300K	5%	1/6W	
R282	1-247-819-00	CARBON	330	5%	1/6W	
R283	1-247-838-00	CARBON	2K	5%	1/6W	
R284	1-247-877-00	CARBON	82K	5%	1/6W	
R286	1-247-848-00	CARBON	5.1K	5%	1/6W	
R287	1-247-831-00	CARBON	1K	5%	1/6W	
R288	1-247-803-00	CARBON	68	5%	1/6W	
R291	1-247-863-00	CARBON	22K	5%	1/6W	
R292	1-247-875-00	CARBON	68K	5%	1/6W	
R293	1-247-819-00	CARBON	330	5%	1/6W	
R294	1-247-818-00	CARBON	300	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R295	1-247-839-00	CARBON	2.2K	5%	1/6W	
R296	1-247-811-00	CARBON	150	5%	1/6W	
R297	1-247-831-00	CARBON	1K	5%	1/6W	
R298	1-247-894-00	CARBON	430K	5%	1/6W	
R299	1-247-892-00	CARBON	360K	5%	1/6W	
R300	1-247-818-00	CARBON	300	5%	1/6W	
R301	1-247-855-00	CARBON	10K	5%	1/6W	
R302	1-247-819-00	CARBON	330	5%	1/6W	
R303	1-247-819-00	CARBON	330	5%	1/6W	
R304	1-247-847-00	CARBON	4.7K	5%	1/6W	
R305	1-247-835-00	CARBON	1.5K	5%	1/6W	
R312	1-247-847-00	CARBON	4.7K	5%	1/6W	
R313	1-247-823-00	CARBON	470	5%	1/6W	
R314	1-247-871-00	CARBON	47K	5%	1/6W	
R315	1-247-855-00	CARBON	10K	5%	1/6W	
R316	1-247-807-00	CARBON	100	5%	1/6W	
R317	1-247-807-00	CARBON	100	5%	1/6W	
R320	1-247-878-00	CARBON	91K	5%	1/6W	
R321	1-247-887-00	CARBON	220K	5%	1/6W	
R325	1-247-807-00	CARBON	100	5%	1/6W	
R326	1-247-852-00	CARBON	7.5K	5%	1/6W	
R327	1-247-863-00	CARBON	22K	5%	1/6W	
R328	1-247-848-00	CARBON	5.1K	5%	1/6W	
R331	1-247-852-00	CARBON	7.5K	5%	1/6W	
R342	1-247-807-00	CARBON	100	5%	1/6W	
R345	1-247-867-00	CARBON	33K	5%	1/6W	
R346	1-247-847-00	CARBON	4.7K	5%	1/6W	
R351	1-247-815-00	CARBON	220	5%	1/6W	
R352	1-247-855-00	CARBON	10K	5%	1/6W	
R353	1-247-831-00	CARBON	1K	5%	1/6W	
R354	1-247-815-00	CARBON	220	5%	1/6W	
R355	1-247-840-00	CARBON	2.4K	5%	1/6W	
R356	1-247-840-00	CARBON	2.4K	5%	1/6W	
R357	1-247-829-00	CARBON	820	5%	1/6W	
R358	1-247-855-00	CARBON	10K	5%	1/6W	
R359	1-247-839-00	CARBON	2.2K	5%	1/6W	
R370	1-247-790-00	CARBON	20	5%	1/6W	
R401	1-247-810-00	CARBON	130	5%	1/6W	
R402	1-247-808-00	CARBON	110	5%	1/6W	
R403	1-247-867-00	CARBON	33K	5%	1/6W	
R404	1-247-871-00	CARBON	47K	5%	1/6W	
R405	1-247-831-00	CARBON	1K	5%	1/6W	
R406	1-247-832-00	CARBON	1.1K	5%	1/6W	
R407	1-247-832-00	CARBON	1.1K	5%	1/6W	
R408	1-247-849-00	CARBON	5.6K	5%	1/6W	
R409	1-247-831-00	CARBON	1K	5%	1/6W	
R410	1-247-831-00	CARBON	1K	5%	1/6W	
R411	1-247-847-00	CARBON	4.7K	5%	1/6W	
R412	1-247-828-00	CARBON	750	5%	1/6W	
R413	1-247-812-00	CARBON	160	5%	1/6W	

Ref.No	Part No.	Description				Remark
R414	1-247-847-00	CARBON	4.7K	5%	1/6W	
R415	1-247-831-00	CARBON	1K	5%	1/6W	
R416	1-247-846-00	CARBON	4.3K	5%	1/6W	
R510	1-247-824-00	CARBON	510	5%	1/6W	
R511	1-247-867-00	CARBON	33K	5%	1/6W	
R512	1-247-847-00	CARBON	4.7K	5%	1/6W	
R513	1-247-863-00	CARBON	22K	5%	1/6W	
R514	1-247-821-00	CARBON	390	5%	1/6W	
R515	1-247-839-00	CARBON	2.2K	5%	1/6W	
R516	1-247-821-00	CARBON	390	5%	1/6W	
R517	1-247-821-00	CARBON	390	5%	1/6W	
R518	1-247-821-00	CARBON	390	5%	1/6W	
R519	1-247-821-00	CARBON	390	5%	1/6W	
R520	1-247-839-00	CARBON	2.2K	5%	1/6W	
R521	1-247-821-00	CARBON	390	5%	1/6W	
R522	1-247-839-00	CARBON	2.2K	5%	1/6W	
R525	1-247-843-00	CARBON	3.3K	5%	1/6W	
R603	1-247-855-00	CARBON	10K	5%	1/6W	

VARIABLE RESISTOR

RV001	1-228-989-00	RES, ADJ, METAL GLAZE 470	
RV002	1-228-748-00	RES, ADJ, CARBON 10K	
RV003	1-228-750-00	RES, ADJ, CARBON 47K	
RV004	1-228-989-00	RES, ADJ, METAL GLAZE 470	
RV005	1-228-750-00	RES, ADJ, CARBON 47K	
RV006	1-228-749-00	RES, ADJ, CARBON 22K	
RV007	1-228-748-00	RES, ADJ, CARBON 10K	
RV008	1-228-745-00	RES, ADJ, CARBON 1K	
RV009	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV010	1-228-749-00	RES, ADJ, CARBON 22K	
RV012	1-228-750-00	RES, ADJ, CARBON 47K	
RV013	1-228-750-00	RES, ADJ, CARBON 47K	
RV014	1-228-748-00	RES, ADJ, CARBON 10K	
RV015	1-228-989-00	RES, ADJ, METAL GLAZE 470	
RV016	1-228-745-00	RES, ADJ, CARBON 1K	
RV017	1-228-753-00	RES, ADJ, CARBON 470K	
RV019	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV020	1-228-745-00	RES, ADJ, CARBON 1K	
RV021	1-228-750-00	RES, ADJ, CARBON 47K	
RV401	1-228-994-00	RES, ADJ, METAL GLAZE 10K	
RV501	1-228-744-00	RES, ADJ, CARBON 470	

COIL

T001	1-426-093-00	COIL, REC C BPT	

CRYSTAL

X001	1-527-345-00	CRYSTAL, OSC	

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When indicating parts by reference number, please include the board name.

RP-17

Ref.No	Part No.	Description			Remark
	♠:A-6711-528-A	RP-17 BOARD, COMPLETE **********************			
	♠:3-684-081-01	CASE (A) (MAIN), SHIELD, RP			
	♠:3-684-082-02	LID, UPPER, RP SHIELD CASE (A)			
	♠:3-684-083-02	LID, BOTTOM, RP SHIELD CASE(A)			
	♠:3-684-084-01	CASE (B) (MAIN), SHIELD, RP			
	♠:3-684-085-01	LID, UPPER, RP SHIELD CASE (B)			
	♠:3-684-086-01	LID, BOTTOM, RP SHIELD CASE(B)			
		CAPACITOR			
C003	1-101-004-00	CERAMIC	0.01MF		50V
C004	1-123-356-00	ELECT	10MF	20%	16V
C005	1-123-379-00	ELECT	0.47MF	20%	50V
C006	1-108-579-00	MYLAR	0.01MF	5%	50V
C007	1-123-356-00	ELECT	10MF	20%	16V
C008	1-101-004-00	CERAMIC	0.01MF		50V
C012	1-101-004-00	CERAMIC	0.01MF		50V
C013	1-102-820-00	CERAMIC	330PF	5%	50V
C014	1-123-356-00	ELECT	10MF	20%	16V
C017	1-102-973-00	CERAMIC	100PF	5%	50V
C018	1-102-973-00	CERAMIC	100PF	5%	50V
C019	1-102-824-00	CERAMIC	470PF	5%	50V
C020	1-102-120-00	CERAMIC	0.0018MF	10%	50V
C021	1-101-880-00	CERAMIC	47PF	5%	50V
C022	1-101-880-00	CERAMIC	47PF	5%	50V
C023	1-123-333-00	ELECT	100MF	20%	16V
C024	1-123-356-00	ELECT	10MF	20%	16V
C025	1-108-579-00	MYLAR	0.01MF	5%	50V
C026	1-123-379-00	ELECT	0.47MF	20%	50V
C027	1-123-356-00	ELECT	10MF	20%	16V
C028	1-101-004-00	CERAMIC	0.01MF		50V
C030	1-101-004-00	CERAMIC	0.01MF		50V
C033	1-102-977-00	CERAMIC	200PF	5%	50V
C034	1-123-332-00	ELECT	47MF	20%	16V
C035	1-101-004-00	CERAMIC	0.01MF		50V
C036	1-123-356-00	ELECT	10MF	20%	16V
C037	1-101-004-00	CERAMIC	0.01MF		50V
C039	1-101-006-00	CERAMIC	0.047MF		50V
C040	1-101-004-00	CERAMIC	0.01MF		50V
C041	1-102-960-00	CERAMIC	24PF	5%	50V
C042	1-102-960-00	CERAMIC	24PF	5%	50V
C043	1-123-318-00	ELECT	33MF	20%	16V
C044	1-101-004-00	CERAMIC	0.01MF		50V
C045	1-102-514-00	CERAMIC	22PF	5%	50V
C046	1-101-004-00	CERAMIC	0.01MF		50V
C047	1-101-004-00	CERAMIC	0.01MF		50V
C048	1-101-004-00	CERAMIC	0.01MF		50V
C049	1-101-004-00	CERAMIC	0.01MF		50V
C050	1-101-004-00	CERAMIC	0.01MF		50V
C051	1-101-004-00	CERAMIC	0.01MF		50V
C052	1-101-004-00	CERAMIC	0.01MF		50V

Ref.No	Part No.	Description			Remark
C053	1-101-004-00	CERAMIC	0.01MF		50V
C054	1-101-004-00	CERAMIC	0.01MF		50V
C055	1-101-004-00	CERAMIC	0.01MF		50V
C056	1-161-025-00	CERAMIC	0.1MF	10%	25V
C057	1-123-333-00	ELECT	100MF	20%	16V
C058	1-161-025-00	CERAMIC	0.1MF	10%	25V
C061	1-102-128-00	CERAMIC	0.0082MF	10%	50V
C062	1-101-004-00	CERAMIC	0.01MF		50V
C063	1-161-025-00	CERAMIC	0.1MF	10%	25V
C064	1-161-025-00	CERAMIC	0.1MF	10%	25V
C101	1-161-025-00	CERAMIC	0.1MF	10%	25V
C102	1-101-004-00	CERAMIC	0.01MF		50V
C103	1-161-025-00	CERAMIC	0.1MF	10%	25V
C104	1-101-004-00	CERAMIC	0.01MF		50V
C105	1-161-025-00	CERAMIC	0.1MF	10%	25V
C106	1-102-977-00	CERAMIC	200PF	5%	50V
C107	1-123-356-00	ELECT	10MF	20%	16V
C108	1-101-004-00	CERAMIC	0.01MF		50V
C109	1-161-025-00	CERAMIC	0.1MF	10%	25V
C110	1-101-004-00	CERAMIC	0.01MF		50V
C111	1-101-004-00	CERAMIC	0.01MF		50V
C112	1-161-025-00	CERAMIC	0.1MF	10%	25V
C113	1-161-025-00	CERAMIC	0.1MF	10%	25V
C114	1-102-978-00	CERAMIC	220PF	5%	50V
C115	1-101-004-00	CERAMIC	0.01MF		50V
C116	1-161-025-00	CERAMIC	0.1MF	10%	25V
C117	1-161-025-00	CERAMIC	0.1MF	10%	25V
C118	1-123-380-00	ELECT	1MF	20%	50V
C119	1-101-004-00	CERAMIC	0.01MF		50V
C120	1-123-380-00	ELECT	1MF	20%	50V
C121	1-102-531-00	CERAMIC	150PF	5%	50V
C122	1-161-025-00	CERAMIC	0.1MF	10%	25V
C123	1-123-318-00	ELECT	33MF	20%	16V
C124	1-101-004-00	CERAMIC	0.01MF		50V
C125	1-101-004-00	CERAMIC	0.01MF		50V
C126	1-161-025-00	CERAMIC	0.1MF	10%	25V
C127	1-123-318-00	ELECT	33MF	20%	16V
C128	1-101-004-00	CERAMIC	0.01MF		50V
C129	1-101-004-00	CERAMIC	0.01MF		50V
C130	1-161-025-00	CERAMIC	0.1MF	10%	25V
C201	1-123-356-00	ELECT	10MF	20%	16V
C202	1-123-356-00	ELECT	10MF	20%	16V
C203	1-123-356-00	ELECT	10MF	20%	16V
C204	1-123-356-00	ELECT	10MF	20%	16V
C205	1-123-356-00	ELECT	10MF	20%	16V
C206	1-123-380-00	ELECT	1MF	20%	50V
C207	1-123-318-00	ELECT	33MF	20%	16V
C208	1-123-356-00	ELECT	10MF	20%	16V
C209	1-123-356-00	ELECT	10MF	20%	16V
C210	1-102-121-00	CERAMIC	0.0022MF	10%	50V
C211	1-123-321-00	ELECT	220MF	20%	16V

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark

CONNECTOR

Ref.No	Part No.	Description	Remark
CN001♠:	1-564-031-00	PIN, CONNECTOR 6P	
CN002♠:	1-564-030-00	PIN, CONNECTOR 5P	
CN003♠:	1-564-028-00	PIN, CONNECTOR 3P	
CN101♠:	1-564-031-00	PIN, CONNECTOR 6P	
CN102♠:	1-564-037-11	PIN, CONNECTOR 12P	
CN103♠:	1-564-030-21	PIN, CONNECTOR 5P	
CN202♠:	1-564-030-00	PIN, CONNECTOR 5P	

DIODE

Ref.No	Part No.	Description	Remark
D001	8-719-901-33	DIODE 1SS133	
D002	8-719-901-33	DIODE 1SS133	
D101	8-719-911-19	DIODE 1SS119	
D102	8-719-911-19	DIODE 1SS119	
D103	8-719-911-19	DIODE 1SS119	
D104	8-719-911-19	DIODE 1SS119	
D105	8-719-911-19	DIODE 1SS119	
D106	8-719-911-19	DIODE 1SS119	
D201	8-719-911-19	DIODE 1SS119	
D202	8-719-911-19	DIODE 1SS119	
D203	8-719-911-19	DIODE 1SS119	

IC

Ref.No	Part No.	Description	Remark
IC001	8-752-004-50	IC CX20045	
IC002	8-759-200-60	IC TA7060AP	
IC201	8-759-145-58	IC UPC4558C	

COIL

Ref.No	Part No.	Description	Remark
L001	1-408-876-00	MICRO INDUCTOR 0.18UH	
L002	1-408-427-00	MICRO INDUCTOR 330UH	
L003	1-408-429-00	MICRO INDUCTOR 470UH	
L006	1-408-421-00	MICRO INDUCTOR 100UH	
L009	1-408-422-00	MICRO INDUCTOR 120UH	
L010	1-408-411-00	MICRO INDUCTOR 15UH	
L011	1-408-411-00	MICRO INDUCTOR 15UH	
L012	1-408-878-00	MICRO INDUCTOR 0.33UH	
L013	1-408-427-00	MICRO INDUCTOR 330UH	
L014	1-408-429-00	MICRO INDUCTOR 470UH	
L016	1-408-429-00	MICRO INDUCTOR 470UH	
L017	1-408-415-00	MICRO INDUCTOR 33UH	
L020	1-407-495-00	MICRO INDUCTOR 1.8MMH	
L021	1-408-429-00	MICRO INDUCTOR 470UH	
L101	1-408-405-00	MICRO INDUCTOR 4.7UH	
L102	1-408-421-00	MICRO INDUCTOR 100UH	
L103	1-408-405-00	MICRO INDUCTOR 4.7UH	
L104	1-408-421-00	MICRO INDUCTOR 100UH	
L105	1-408-421-00	MICRO INDUCTOR 100UH	

TRANSISTOR

Ref.No	Part No.	Description	Remark
Q001	=>8-729-245-83	TRANSISTOR 2SC2458	
Q002	=>8-729-245-83	TRANSISTOR 2SC2458	
Q003	=>8-729-177-43	TRANSISTOR 2SD774	
Q004	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q005	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q006	=>8-729-245-83	TRANSISTOR 2SC2458	
Q007	=>8-729-245-83	TRANSISTOR 2SC2458	
Q008	=>8-729-245-83	TRANSISTOR 2SC2458	
Q101	=>8-729-245-83	TRANSISTOR 2SC2458	
Q102	8-729-800-42	TRANSISTOR 2SK152	
Q103	=>8-729-245-83	TRANSISTOR 2SC2458	
Q104	8-729-384-46	TRANSISTOR 2SA844-C	
Q105	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q106	=>8-729-245-83	TRANSISTOR 2SC2458	
Q107	8-729-800-42	TRANSISTOR 2SK152	
Q108	8-729-384-46	TRANSISTOR 2SA844-C	
Q109	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q110	=>8-729-245-83	TRANSISTOR 2SC2458	
Q111	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q112	8-729-384-46	TRANSISTOR 2SA844-C	
Q113	8-729-113-33	TRANSISTOR 2SB733-4	
Q114	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q115	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q201	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

Ref.No	Part No.	Description				Remark
R001	1-247-831-00	CARBON	1K	5%	1/6W	
R002	1-247-816-00	CARBON	240	5%	1/6W	
R004	1-247-857-00	CARBON	12K	5%	1/6W	
R009	1-247-832-00	CARBON	1.1K	5%	1/6W	
R010	1-247-829-00	CARBON	820	5%	1/6W	
R012	1-247-831-00	CARBON	1K	5%	1/6W	
R013	1-247-831-00	CARBON	1K	5%	1/6W	
R014	1-247-835-00	CARBON	1.5K	5%	1/6W	
R015	1-247-855-00	CARBON	10K	5%	1/6W	
R016	1-247-879-00	CARBON	100K	5%	1/6W	
R017	1-247-835-00	CARBON	1.5K	5%	1/6W	
R020	1-247-816-00	CARBON	240	5%	1/6W	
R022	1-247-866-00	CARBON	30K	5%	1/6W	
R023	1-247-862-00	CARBON	20K	5%	1/6W	
R024	1-247-824-00	CARBON	510	5%	1/6W	
R025	1-247-824-00	CARBON	510	5%	1/6W	
R026	1-247-823-00	CARBON	470	5%	1/6W	
R028	1-247-824-00	CARBON	510	5%	1/6W	
R036	1-247-836-00	CARBON	1.6K	5%	1/6W	
R037	1-247-864-00	CARBON	24K	5%	1/6W	
R038	1-247-866-00	CARBON	30K	5%	1/6W	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R039 ⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R040	1-247-831-00	CARBON	1K	5%	1/6W	
R042	1-247-831-00	CARBON	1K	5%	1/6W	
R043	1-247-829-00	CARBON	820	5%	1/6W	
R045	1-247-807-00	CARBON	100	5%	1/6W	
R048	1-247-819-00	CARBON	330	5%	1/6W	
R049	1-247-819-00	CARBON	330	5%	1/6W	
R050	1-247-831-00	CARBON	1K	5%	1/6W	
R051	1-247-857-00	CARBON	12K	5%	1/6W	
R052	1-247-858-00	CARBON	13K	5%	1/6W	
R053	1-247-831-00	CARBON	1K	5%	1/6W	
R054	1-247-831-00	CARBON	1K	5%	1/6W	
R055	1-247-825-00	CARBON	560	5%	1/6W	
R056	1-247-831-00	CARBON	1K	5%	1/6W	
R057	1-247-851-00	CARBON	6.8K	5%	1/6W	
R058	1-247-843-00	CARBON	3.3K	5%	1/6W	
R059	1-247-841-00	CARBON	2.7K	5%	1/6W	
R060	1-247-831-00	CARBON	1K	5%	1/6W	
R061	1-247-829-00	CARBON	820	5%	1/6W	
R101	1-247-849-00	CARBON	5.6K	5%	1/6W	
R102	1-247-831-00	CARBON	1K	5%	1/6W	
R103	1-247-855-00	CARBON	10K	5%	1/6W	
R104	1-247-855-00	CARBON	10K	5%	1/6W	
R105	1-247-821-00	CARBON	390	5%	1/6W	
R106	1-247-818-00	CARBON	300	5%	1/6W	
R107	1-247-810-00	CARBON	130	5%	1/6W	
R109 ⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R110	1-247-831-00	CARBON	1K	5%	1/6W	
R111	1-247-807-00	CARBON	100	5%	1/6W	
R112	1-247-807-00	CARBON	100	5%	1/6W	
R113	1-247-849-00	CARBON	5.6K	5%	1/6W	
R114	1-247-818-00	CARBON	300	5%	1/6W	
R115	1-247-799-00	CARBON	47	5%	1/6W	
R116	1-247-827-00	CARBON	680	5%	1/6W	
R117	1-247-821-00	CARBON	390	5%	1/6W	
R118	1-247-807-00	CARBON	100	5%	1/6W	
R119	1-247-855-00	CARBON	10K	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R122	1-247-831-00	CARBON	1K	5%	1/6W	
R123	1-247-807-00	CARBON	100	5%	1/6W	
R124	1-247-839-00	CARBON	2.2K	5%	1/6W	
R125	1-247-869-00	CARBON	39K	5%	1/6W	
R126	1-247-831-00	CARBON	1K	5%	1/6W	
R127	1-247-853-00	CARBON	8.2K	5%	1/6W	
R128	1-247-855-00	CARBON	10K	5%	1/6W	
R129	1-247-820-00	CARBON	360	5%	1/6W	
R130	1-247-819-00	CARBON	330	5%	1/6W	
R131	1-247-799-00	CARBON	47	5%	1/6W	
R132 ⚠	1-211-608-00	CARBON	56	5%	1/2W	F
R133	1-247-823-00	CARBON	470	5%	1/6W	
R134	1-247-826-00	CARBON	620	5%	1/6W	
R135	1-247-079-00	CARBON	4.7	5%	1/4W	
R136	1-247-807-00	CARBON	100	5%	1/6W	
R137	1-247-857-00	CARBON	12K	5%	1/6W	
R138	1-247-827-00	CARBON	680	5%	1/6W	
R139	1-247-807-00	CARBON	100	5%	1/6W	
R140	1-247-807-00	CARBON	100	5%	1/6W	
R141	1-247-831-00	CARBON	1K	5%	1/6W	
R142	1-247-849-00	CARBON	5.6K	5%	1/6W	
R143	1-247-849-00	CARBON	5.6K	5%	1/6W	
R144	1-247-871-00	CARBON	47K	5%	1/6W	
R145	1-247-850-00	CARBON	6.2K	5%	1/6W	
R146	1-247-842-00	CARBON	3K	5%	1/6W	
R147	1-247-849-00	CARBON	5.6K	5%	1/6W	
R148	1-247-871-00	CARBON	47K	5%	1/6W	
R149	1-247-850-00	CARBON	6.2K	5%	1/6W	
R150	1-247-842-00	CARBON	3K	5%	1/6W	
R201	1-247-855-00	CARBON	10K	5%	1/6W	
R202	1-247-879-00	CARBON	100K	5%	1/6W	
R203	1-247-879-00	CARBON	100K	5%	1/6W	
R204	1-247-886-00	CARBON	200K	5%	1/6W	
R205	1-247-873-00	CARBON	56K	5%	1/6W	
R206	1-247-855-00	CARBON	10K	5%	1/6W	
R207	1-247-883-00	CARBON	150K	5%	1/6W	
R208	1-247-866-00	CARBON	30K	5%	1/6W	
R209	1-247-831-00	CARBON	1K	5%	1/6W	
R210	1-247-879-00	CARBON	100K	5%	1/6W	
R211	1-247-871-00	CARBON	47K	5%	1/6W	
R212	1-247-859-00	CARBON	15K	5%	1/6W	
R213 ⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F

VARIABLE RESISTOR

RV001	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV002	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV003	1-228-745-00	RES, ADJ, CARBON 1K
RV004	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV101	1-228-990-00	RES, ADJ, METAL GLAZE 1K
RV102	1-228-990-00	RES, ADJ, METAL GLAZE 1K

TRANSFORMER

T101	1-427-546-11	TRANSFORMER, I/O
T102	1-427-546-11	TRANSFORMER, I/O

THERMISTOR

TH201	1-800-202-XX	THERMISTOR S-10K

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

The parts for AF-3 board whose end of part No. is -13.

Ref.No	Part No.	Description	Remark
	♠:A-6713-200-A	AF-3 BOARD, COMPLETE **********************	
	♠:3-684-072-01	LID, BOTTOM, AF SHIELD CASE(S)	
	♠:3-684-087-01	CASE (S) (MAIN), SHIELD, AF	
	3-701-748-00	CLAMP	

B.P.F

Ref.No	Part No.	Description
BPF001	1-235-367-11	B.P.F
BPF002	1-235-367-11	B.P.F
BPF003	1-235-366-11	B.P.F
BPF004	1-235-366-11	B.P.F

CAPACITOR

Ref.No	Part No.	Description			Remark
C001	1-123-356-00	ELECT	10MF	20%	16V
C002	1-161-025-00	CERAMIC	0.1MF	10%	25V
C003	1-161-025-00	CERAMIC	0.1MF	10%	25V
C004	1-161-025-00	CERAMIC	0.1MF	10%	25V
C006	1-161-025-00	CERAMIC	0.1MF	10%	25V
C007	1-123-332-00	ELECT	47MF	20%	16V
C008	1-161-025-00	CERAMIC	0.1MF	10%	25V
C010	1-123-306-00	ELECT	47MF	20%	10V
C011	1-123-306-00	ELECT	47MF	20%	10V
C012	1-161-025-00	CERAMIC	0.1MF	10%	25V
C013	1-123-306-00	ELECT	47MF	20%	6.3V
C014	1-161-025-00	CERAMIC	0.1MF	10%	25V
C015	1-161-025-00	CERAMIC	0.1MF	10%	25V
C016	1-102-519-00	CERAMIC	36PF	5%	50V
C017	1-123-332-00	ELECT	47MF	20%	16V
C018	1-161-025-00	CERAMIC	0.1MF	10%	25V
C020	1-161-025-00	CERAMIC	0.1MF	10%	25V
C021	1-161-025-00	CERAMIC	0.1MF	10%	25V
C023	1-123-356-00	ELECT	10MF	20%	16V
C025	1-102-973-00	CERAMIC	100PF	5%	50V
C026	1-101-884-00	CERAMIC	56PF	5%	50V
C027	1-161-025-00	CERAMIC	0.1MF	10%	25V
C028	1-123-381-00	ELECT	2.2MF	20%	50V
C030	1-123-381-00	ELECT	2.2MF	20%	50V
C031	1-161-025-00	CERAMIC	0.1MF	10%	25V
C032	1-123-332-00	ELECT	47MF	20%	16V
C033	1-161-025-00	CERAMIC	0.1MF	10%	25V
C034	1-102-519-00	CERAMIC	36PF	5%	50V
C035	1-161-025-00	CERAMIC	0.1MF	10%	25V
C036	1-161-025-00	CERAMIC	0.1MF	10%	25V
C038	1-102-973-00	CERAMIC	100PF	5%	50V
C039	1-101-884-00	CERAMIC	56PF	5%	50V
C041	1-123-356-00	ELECT	10MF	20%	16V
C042	1-123-333-00	ELECT	100MF	20%	16V
C046	1-161-025-00	CERAMIC	0.1MF	10%	25V
C048	1-123-333-00	ELECT	100MF	20%	16V
C050	1-123-332-00	ELECT	47MF	20%	16V
C051	1-161-025-00	CERAMIC	0.1MF	10%	25V
C052	1-161-025-00	CERAMIC	0.1MF	10%	25V
C053	1-161-025-00	CERAMIC	0.1MF	10%	25V
C054	1-102-822-00	CERAMIC	390PF	5%	50V
C055	1-161-025-00	CERAMIC	0.1MF	10%	25V
C057	1-102-973-00	CERAMIC	100PF	5%	50V
C058	1-101-884-00	CERAMIC	56PF	5%	50V
C059	1-123-356-00	ELECT	10MF	20%	16V
C060	1-123-381-00	ELECT	2.2MF	20%	50V
C062	1-123-381-00	ELECT	2.2MF	20%	50V
C063	1-161-025-00	CERAMIC	0.1MF	10%	25V
C064	1-161-025-00	CERAMIC	0.1MF	10%	25V
C065	1-123-332-00	ELECT	47MF	20%	16V
C069	1-161-025-00	CERAMIC	0.1MF	10%	25V
C070	1-161-025-00	CERAMIC	0.1MF	10%	25V
C071	1-161-025-00	CERAMIC	0.1MF	10%	25V
C072	1-102-822-00	CERAMIC	390PF	5%	50V
C073	1-161-025-00	CERAMIC	0.1MF	10%	25V
C075	1-102-973-00	CERAMIC	100PF	5%	50V
C076	1-101-884-00	CERAMIC	56PF	5%	50V
C078	1-123-333-00	ELECT	100MF	20%	16V
C080	1-161-025-00	CERAMIC	0.1MF	10%	25V
C081	1-108-561-00	MYLAR	0.0018MF	5%	50V
C082	1-108-565-00	MYLAR	0.0027MF	5%	50V
C083	1-108-569-00	MYLAR	0.0039MF	5%	50V
C084	1-123-356-00	ELECT	10MF	20%	16V
C086	1-123-307-00	ELECT	100MF	20%	10V
C087	1-161-013-00	CERAMIC	0.01MF	10%	25V
C088	1-123-307-00	ELECT	100MF	20%	10V
C089	1-123-332-00	ELECT	47MF	20%	16V
C090	1-123-332-00	ELECT	47MF	20%	16V
C091	1-123-356-00	ELECT	10MF	20%	16V
C092	1-102-958-00	CERAMIC	20PF	5%	50V
C093	1-130-485-00	MYLAR	0.015MF	5%	50V
C095	1-130-485-00	MYLAR	0.015MF	5%	50V
C096	1-130-494-11	MYLAR	0.082MF	5%	50V
C098	1-130-475-00	MYLAR	0.0022MF	5%	50V
C099	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C100	1-130-469-00	MYLAR	680PF	5%	50V
C101	1-108-590-00	MYLAR	0.03MF	5%	50V
C102	1-131-383-00	TANTALUM	10MF	10%	6.3V
C103	1-131-347-00	TANTALUM	1MF	20%	16V
C105	1-123-307-00	ELECT	100MF	20%	10V
C106	1-161-013-00	CERAMIC	0.01MF	10%	25V
C107	1-130-497-00	MYLAR	0.15MF	5%	50V
C109	1-108-569-00	MYLAR	0.0039MF	5%	50V
C110	1-108-565-00	MYLAR	0.0027MF	5%	50V
C111	1-108-561-00	MYLAR	0.0018MF	5%	50V
C115	1-123-356-00	ELECT	10MF	20%	16V
C116	1-123-307-00	ELECT	100MF	20%	10V
C117	1-123-332-00	ELECT	47MF	20%	16V
C118	1-123-332-00	ELECT	47MF	20%	16V
C119	1-102-958-00	CERAMIC	20PF	5%	50V
C120	1-130-485-00	MYLAR	0.015MF	5%	50V
C121	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C122	1-130-469-00	MYLAR	680PF	5%	50V
C123	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C124	1-130-497-00	MYLAR	0.15MF	5%	50V
C125	1-131-383-00	TANTALUM	10MF	10%	6.3V

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description			Remark
C126	1-131-347-00	TANTALUM	1MF	20%	16V
C127	1-108-590-00	MYLAR	0.03MF	5%	50V
C128	1-130-475-00	MYLAR	0.0022MF	5%	50V
C130	1-130-494-11	MYLAR	0.082MF	5%	50V
C131	1-130-485-00	MYLAR	0.015MF	5%	50V
C132	1-123-356-00	ELECT	10MF	20%	16V
C133	1-161-013-00	CERAMIC	0.01MF	10%	25V
C134	1-123-330-00	ELECT	22MF	20%	16V
C143	1-123-332-00	ELECT	47MF	20%	16V
C144	1-123-330-00	ELECT	22MF	20%	16V
C146	1-123-332-00	ELECT	47MF	20%	16V
C147	1-123-330-00	ELECT	22MF	20%	16V
C150	1-123-332-00	ELECT	47MF	20%	16V
C151	1-123-381-00	ELECT	2.2MF	20%	50V
C152	1-102-973-00	CERAMIC	100PF	5%	50V
C153	1-123-332-00	ELECT	47MF	20%	16V
C154	1-123-381-00	ELECT	2.2MF	20%	50V
C155	1-102-973-00	CERAMIC	100PF	5%	50V
C156	1-123-330-00	ELECT	22MF	20%	16V
C157	1-123-330-00	ELECT	22MF	20%	16V
C158	1-123-330-00	ELECT	22MF	20%	16V
C159	1-123-318-00	ELECT	33MF	20%	16V
C160	1-123-332-00	ELECT	47MF	20%	16V
C161	1-123-330-00	ELECT	22MF	20%	16V
C162	1-123-318-00	ELECT	33MF	20%	16V
C163	1-123-356-00	ELECT	10MF	20%	16V
C164	1-123-356-00	ELECT	10MF	20%	16V
C165	1-123-330-00	ELECT	22MF	20%	16V
C166	1-123-356-00	ELECT	10MF	20%	16V
C167	1-123-380-00	ELECT	1MF	20%	50V
C168	1-123-356-00	ELECT	10MF	20%	16V
C169	1-123-330-00	ELECT	22MF	20%	16V
C170	1-123-380-00	ELECT	1MF	20%	50V
C171	1-161-025-00	CERAMIC	0.1MF	10%	25V
C173	1-161-013-00	CERAMIC	0.01MF	10%	25V
C175	1-123-332-00	ELECT	47MF	20%	16V
C176	1-102-976-00	CERAMIC	180PF	5%	50V
C177	1-161-013-00	CERAMIC	0.01MF	10%	25V
C178	1-102-522-00	CERAMIC	51PF	5%	50V
C179	1-102-978-00	CERAMIC	220PF	5%	50V
C180	1-102-978-00	CERAMIC	220PF	5%	50V
C181	1-161-013-00	CERAMIC	0.01MF	10%	25V
C182	1-123-332-00	ELECT	47MF	20%	16V
C183	1-123-332-00	ELECT	47MF	20%	16V
C184	1-102-529-00	CERAMIC	100PF	5%	50V
C185	1-123-332-00	ELECT	47MF	20%	16V
C186	1-123-332-00	ELECT	47MF	20%	16V
C187	1-161-025-00	CERAMIC	0.1MF	10%	25V
C189	1-161-025-00	CERAMIC	0.1MF	10%	25V
C190	1-123-332-00	ELECT	47MF	20%	16V
C191	1-161-025-00	CERAMIC	0.1MF	10%	25V
C192	1-123-332-00	ELECT	47MF	20%	16V
C193	1-102-529-00	CERAMIC	100PF	5%	50V
C194	1-123-332-00	ELECT	47MF	20%	16V
C195	1-123-332-00	ELECT	47MF	20%	16V
C196	1-123-332-00	ELECT	47MF	20%	16V
C197	1-102-625-61	CERAMIC	100PF	5%	50V
C198	1-161-013-00	CERAMIC	0.01MF	10%	25V
C199	1-102-517-00	CERAMIC	30PF	5%	50V
C200	1-102-531-00	CERAMIC	150PF	5%	50V
C201	1-102-531-00	CERAMIC	150PF	5%	50V
C202	1-161-013-00	CERAMIC	0.01MF	10%	25V
C203	1-161-013-00	CERAMIC	0.01MF	10%	25V
C208	1-161-025-00	CERAMIC	0.1MF	10%	25V
C209	1-123-356-00	ELECT	10MF	20%	16V
C211	1-161-025-00	CERAMIC	0.1MF	10%	25V
C213	1-123-332-00	ELECT	47MF	20%	16V
C216	1-123-381-00	ELECT	2.2MF	20%	50V
C217	1-123-381-00	ELECT	2.2MF	20%	50V
C221	1-123-330-00	ELECT	22MF	20%	16V
C222	1-123-330-00	ELECT	22MF	20%	16V
C223	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C224	1-123-380-00	ELECT	1MF	20%	50V
C225	1-161-013-00	CERAMIC	0.01MF	10%	25V
C226	1-161-013-00	CERAMIC	0.01MF	10%	25V
C227	1-161-013-00	CERAMIC	0.01MF	10%	25V
C229	1-130-471-00	MYLAR	0.001MF	5%	50V
C232	1-130-471-00	MYLAR	0.001MF	5%	50V
C235	1-161-013-00	CERAMIC	0.01MF	10%	25V
C236	1-130-491-00	MYLAR	0.047MF	5%	50V
C237	1-130-491-00	MYLAR	0.047MF	5%	50V
C238	1-123-330-00	ELECT	22MF	20%	16V
C240	1-161-025-00	CERAMIC	0.1MF	10%	25V
C241	1-123-356-00	ELECT	10MF	20%	16V
C501	1-124-233-00	ELECT	10MF	20%	16V
C701	1-123-356-00	ELECT	10MF	20%	16V
C702	1-123-356-00	ELECT	10MF	20%	16V
C704	1-123-322-00	ELECT	330MF	20%	16V
C706	1-124-231-00	ELECT	4.7MF	20%	16V
C709	1-123-381-00	ELECT	2.2MF	20%	50V
C710	1-130-469-00	MYLAR	680PF	5%	50V
C711	1-130-469-00	MYLAR	680PF	5%	50V
C712	1-123-332-00	ELECT	47MF	20%	16V
C713	1-123-332-00	ELECT	47MF	20%	16V
C714	1-130-469-00	MYLAR	680PF	5%	50V
C715	1-130-469-00	MYLAR	680PF	5%	50V
C722	1-124-231-00	ELECT	4.7MF	20%	16V
C724	1-123-380-00	ELECT	1MF	20%	50V
C725	1-123-380-00	ELECT	1MF	20%	50V
C726	1-161-039-00	CERAMIC	0.001MF	10%	25V
C727	1-102-824-00	CERAMIC	470PF	5%	50V
C728	1-102-824-00	CERAMIC	470PF	5%	50V
C731	1-123-332-00	ELECT	47MF	20%	16V
C732	1-123-332-00	ELECT	47MF	20%	16V
C733	1-161-013-00	CERAMIC	0.01MF	10%	25V
C734	1-124-168-00	ELECT	100MF	20%	16V
C735	1-123-381-00	ELECT	2.2MF	20%	50V
C736	1-123-381-00	ELECT	2.2MF	20%	50V
C737	1-161-055-00	CERAMIC	0.022MF	10%	25V

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description			Remark
C738	1-123-233-00	ELECT	10MF	20%	16V
C739	1-161-057-00	CERAMIC	0.033MF	10%	25V
C741	1-124-475-11	ELECT	470MF	20%	16V
C742	1-123-352-00	ELECT	1MF	20%	50V
C743	1-123-352-00	ELECT	1MF	20%	50V

CONNECTOR

CN001♠:	1-560-892-00	PIN, CONNECTOR 4P
CN002♠:	1-560-891-00	PIN, CONNECTOR 3P
CN003♠:	1-560-898-00	PIN, CONNECTOR 10P
CN004♠:	1-560-896-00	PIN, CONNECTOR 8P
CN005♠:	1-560-893-00	PIN, CONNECTOR 5P
CN006♠:	1-560-892-00	PIN, CONNECTOR 4P
CN007♠:	1-560-892-00	PIN, CONNECTOR 4P
CN008♠:	1-560-897-00	PIN, CONNECTOR 9P
CN009♠:	1-560-891-00	PIN, CONNECTOR 3P
CN011♠:	1-560-900-00	PIN, CONNECTOR 12P
CN012♠:	1-560-890-00	PIN, CONNECTOR 2P

DIODE

D007	8-719-911-19	DIODE 1SS119
D008	8-719-911-19	DIODE 1SS119
D011	8-719-000-12	DIODE MC931
D013	8-719-000-12	DIODE MC931
D017	=>8-719-911-19	DIODE 1SS119
D019	=>8-719-911-19	DIODE 1SS119
D025	8-719-100-34	DIODE RD5.6E-B1
D027	=>8-719-911-19	DIODE 1SS119
D504	8-719-911-19	DIODE 1SS119
D505	8-719-156-07	DIODE RD5.6E-B
D508	8-719-162-07	DIODE RD6.2E-B
D509	8-719-812-33	DIODE TLG123A
D510	8-719-812-33	DIODE TLG123A
D511	8-719-812-33	DIODE TLG123A
D512	8-719-812-33	DIODE TLG123A
D514	8-719-911-19	DIODE 1SS119
D515	8-719-911-19	DIODE 1SS119
D516	8-719-911-19	DIODE 1SS119
D517	8-719-911-19	DIODE 1SS119
D521	8-719-911-19	DIODE 1SS119
D522	8-719-911-19	DIODE 1SS119
D523	8-719-911-19	DIODE 1SS119
D524	8-719-812-33	DIODE TLG123A
D525	8-719-175-07	DIODE RD7.5E-B
D526	8-719-175-07	DIODE RD7.5E-B
D527	8-719-911-19	DIODE 1SS119
D528	8-719-911-19	DIODE 1SS119
D529	8-719-911-19	DIODE 1SS119
D530	8-719-911-19	DIODE 1SS119
D531	8-719-911-19	DIODE 1SS119
D532	8-719-911-19	DIODE 1SS119

IC

Ref.No	Part No.	Description	Remark
IC001	8-759-324-12	IC HA12412	
IC002	8-759-324-12	IC HA12412	
IC003	8-759-101-67	IC UPC1167C2	
IC004	8-759-101-67	IC UPC1167C2	
IC005	8-759-103-93	IC UPC393C	
IC006	8-759-990-82	IC TL082CP	
IC007	8-759-990-82	IC TL082CP	
IC008	8-759-240-66	IC TC4066BP	
IC009	8-759-240-66	IC TC4066BP	
IC010	8-759-400-04	IC AN6120	
IC011	8-759-400-04	IC AN6120	
IC012	8-752-009-70	IC CX20097	
IC013	8-759-700-62	IC NJM4562D	
IC014	8-759-240-52	IC TC4052BP	
IC015	8-759-700-62	IC NJM4562D	
IC016	8-752-006-10	IC CX20061	
IC017	8-752-006-10	IC CX20061	
IC018	8-759-240-93	IC TC4093BP	
IC019	8-759-240-01	IC TC4001BP	
IC020	8-759-910-68	IC MB88201-152G	

COIL

L001	1-408-421-00	MICRO INDUCTOR 100UH
L002	1-408-413-00	MICRO INDUCTOR 22UH
L003	1-407-163-XX	MICRO INDUCTOR 33UH
L004	1-410-079-11	COIL, PHASE SIFT 33UH
L005	1-410-079-11	COIL, PHASE SIFT 33UH
L007	1-408-415-00	MICRO INDUCTOR 33UH
L008	1-408-418-00	MICRO INDUCTOR 56UH
L010	1-408-413-00	MICRO INDUCTOR 22UH
L011	1-408-416-00	MICRO INDUCTOR 39UH
L012	1-407-163-XX	MICRO INDUCTOR 33UH
L013	1-408-413-00	MICRO INDUCTOR 22UH
L014	1-408-413-00	MICRO INDUCTOR 22UH
L015	1-408-413-00	MICRO INDUCTOR 22UH
L016	1-408-413-00	MICRO INDUCTOR 22UH
L020	1-408-417-00	MICRO INDUCTOR 47UH
L021	1-408-417-00	MICRO INDUCTOR 47UH
L022	1-408-417-00	MICRO INDUCTOR 47UH

L.P.F

LPF001	1-235-365-11	L.P.F
LPF002	1-235-365-11	L.P.F

IC LINK

PS001⚠.	1-532-605-11	LINK. IC (ICP-N10)

TRANSISTOR

Q001 ⚠.	8-729-113-33	TRANSISTOR 2SB733-4
Q002	=>8-729-245-83	TRANSISTOR 2SC2458
Q003	=>8-729-204-83	TRANSISTOR 2SA1048-GR
Q004	=>8-729-245-83	TRANSISTOR 2SC2458
Q007	8-729-177-43	TRANSISTOR 2SD774

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

AF-3

Ref.No	Part No.	Description				Remark
Q008	8-729-603-50	TRANSISTOR 2SC403SP				
Q009	8-729-603-50	TRANSISTOR 2SC403SP				
Q010	8-729-106-07	TRANSISTOR 2SK514-H				
Q012	8-729-965-22	TRANSISTOR 2SC1652				
Q013	8-729-603-50	TRANSISTOR 2SC403SP				
Q015	8-729-106-07	TRANSISTOR 2SK514-H				
Q016	8-729-603-50	TRANSISTOR 2SC403SP				
Q017	=>8-729-245-83	TRANSISTOR 2SC2458				
Q019	=>8-729-245-83	TRANSISTOR 2SC2458				
Q020	=>8-729-245-83	TRANSISTOR 2SC2458				
Q021	=>8-729-245-83	TRANSISTOR 2SC2458				
Q022	=>8-729-245-83	TRANSISTOR 2SC2458				
Q023	=>8-729-245-83	TRANSISTOR 2SC2458				
Q024	=>8-729-245-83	TRANSISTOR 2SC2458				
Q030	=>8-729-245-83	TRANSISTOR 2SC2458				
Q031	=>8-729-245-83	TRANSISTOR 2SC2458				
Q032	8-729-965-22	TRANSISTOR 2SC1652				
Q034	8-729-965-22	TRANSISTOR 2SC1652				
Q035	8-729-965-22	TRANSISTOR 2SC1652				
Q036	8-729-965-22	TRANSISTOR 2SC1652				
Q037	=>8-729-245-83	TRANSISTOR 2SC2458				
Q038	=>8-729-245-83	TRANSISTOR 2SC2458				
Q044	8-729-965-22	TRANSISTOR 2SC1652				
Q046	=>8-729-245-83	TRANSISTOR 2SC2458				
Q049	8-729-900-89	TRANSISTOR DTC144ES				
Q701	=>8-729-245-83	TRANSISTOR 2SC2458				
Q703	=>8-729-245-83	TRANSISTOR 2SC2458				
Q704	=>8-729-245-83	TRANSISTOR 2SC2458				
Q705	=>8-729-245-83	TRANSISTOR 2SC2458				
Q706	8-729-965-22	TRANSISTOR 2SC1652				
Q707	8-729-993-72	TRANSISTOR 2SA937				
Q708	=>8-729-245-83	TRANSISTOR 2SC2458				
Q709	8-729-117-54	TRANSISTOR 2SA1175				
Q710	8-729-117-54	TRANSISTOR 2SA1175				
Q711	=>8-729-245-83	TRANSISTOR 2SC2458				
Q712	8-729-117-54	TRANSISTOR 2SA1175				
Q713	8-729-117-54	TRANSISTOR 2SA1175				
Q714	8-729-384-48	TRANSISTOR 2SA844				
Q715	8-729-384-48	TRANSISTOR 2SA844				
Q716	=>8-729-245-83	TRANSISTOR 2SC2458				
Q720	8-729-117-54	TRANSISTOR 2SA1175				
Q721	=>8-729-245-83	TRANSISTOR 2SC2458				
Q722	=>8-729-245-83	TRANSISTOR 2SC2458				
Q723	8-729-900-33	TRANSISTOR DTC144EF				
Q724	=>8-729-245-83	TRANSISTOR 2SC2458				
Q725	8-729-117-54	TRANSISTOR 2SA1175				
		RESISTOR				
R001	1-247-807-00	CARBON	100	5%	1/6W	
R002	1-247-847-00	CARBON	4.7K	5%	1/6W	
R003	1-247-831-00	CARBON	1K	5%	1/6W	
R004	1-247-867-00	CARBON	33K	5%	1/6W	
R005	1-247-867-00	CARBON	33K	5%	1/6W	
R006	1-247-823-00	CARBON	470	5%	1/6W	
R007	1-247-873-00	CARBON	56K	5%	1/6W	
R008	1-247-855-00	CARBON	10K	5%	1/6W	
R012	1-247-867-00	CARBON	33K	5%	1/6W	
R013	1-247-855-00	CARBON	10K	5%	1/6W	
R014	1-247-855-00	CARBON	10K	5%	1/6W	
R026	1-247-823-00	CARBON	470	5%	1/6W	
R027	1-247-861-00	CARBON	18K	5%	1/6W	
R028	1-247-831-00	CARBON	1K	5%	1/6W	
R029	1-247-825-00	CARBON	560	5%	1/6W	
R030	1-247-815-00	CARBON	220	5%	1/6W	
R031	1-247-822-00	CARBON	430	5%	1/6W	
R033	1-247-809-00	CARBON	120	5%	1/6W	
R034	1-247-819-00	CARBON	330	5%	1/6W	
R035 ⚠	1-212-853-00	FUSIBLE	6.8	5%	1/4W	F
R036	1-247-855-00	CARBON	10K	5%	1/6W	
R037	1-247-823-00	CARBON	470	5%	1/6W	
R038	1-247-855-00	CARBON	10K	5%	1/6W	
R039	1-247-855-00	CARBON	10K	5%	1/6W	
R040	1-247-855-00	CARBON	10K	5%	1/6W	
R042	1-247-855-00	CARBON	10K	5%	1/6W	
R043	1-247-855-00	CARBON	10K	5%	1/6W	
R044	1-247-823-00	CARBON	470	5%	1/6W	
R045	1-247-861-00	CARBON	18K	5%	1/6W	
R046	1-247-831-00	CARBON	1K	5%	1/6W	
R047	1-247-825-00	CARBON	560	5%	1/6W	
R048	1-247-847-00	CARBON	4.7K	5%	1/6W	
R049	1-247-815-00	CARBON	220	5%	1/6W	
R050	1-247-822-00	CARBON	430	5%	1/6W	
R052	1-247-809-00	CARBON	120	5%	1/6W	
R054	1-247-855-00	CARBON	10K	5%	1/6W	
R055	1-247-855-00	CARBON	10K	5%	1/6W	
R056	1-247-855-00	CARBON	10K	5%	1/6W	
R057	1-247-855-00	CARBON	10K	5%	1/6W	
R061	1-247-831-00	CARBON	1K	5%	1/6W	
R069	1-247-839-00	CARBON	2.2K	5%	1/6W	
R071	1-247-855-00	CARBON	10K	5%	1/6W	
R072	1-247-879-00	CARBON	100K	5%	1/6W	
R073	1-247-851-00	CARBON	6.8K	5%	1/6W	
R074	1-247-867-00	CARBON	33K	5%	1/6W	
R078	1-247-823-00	CARBON	470	5%	1/6W	
R079	1-247-831-00	CARBON	1K	5%	1/6W	
R080	1-247-825-00	CARBON	560	5%	1/6W	
R081	1-247-813-00	CARBON	180	5%	1/6W	
R082	1-247-815-00	CARBON	220	5%	1/6W	
R083	1-247-822-00	CARBON	430	5%	1/6W	
R085	1-247-814-00	CARBON	200	5%	1/6W	
R087	1-247-855-00	CARBON	10K	5%	1/6W	
R088	1-247-855-00	CARBON	10K	5%	1/6W	
R089	1-247-855-00	CARBON	10K	5%	1/6W	
R090	1-247-823-00	CARBON	470	5%	1/6W	
R091	1-247-855-00	CARBON	10K	5%	1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R093	1-247-831-00	CARBON	1K	5%	1/6W	
R099	1-247-838-00	CARBON	2K	5%	1/6W	
R105	1-247-839-00	CARBON	2.2K	5%	1/6W	
R106	1-247-823-00	CARBON	470	5%	1/6W	
R107	1-247-831-00	CARBON	1K	5%	1/6W	
R108	1-247-825-00	CARBON	560	5%	1/6W	
R110	1-247-839-00	CARBON	2.2K	5%	1/6W	
R111	1-247-867-00	CARBON	33K	5%	1/6W	
R112	1-247-855-00	CARBON	10K	5%	1/6W	
R113	1-247-815-00	CARBON	220	5%	1/6W	
R115	1-247-822-00	CARBON	430	5%	1/6W	
R116	1-247-814-00	CARBON	200	5%	1/6W	
R117	1-247-855-00	CARBON	10K	5%	1/6W	
R118	1-247-855-00	CARBON	10K	5%	1/6W	
R119	1-247-855-00	CARBON	10K	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R122	1-247-848-00	CARBON	5.1K	5%	1/6W	
R123	1-247-863-00	CARBON	22K	5%	1/6W	
R124	1-247-863-00	CARBON	22K	5%	1/6W	
R125	1-247-863-00	CARBON	22K	5%	1/6W	
R126	1-247-839-00	CARBON	2.2K	5%	1/6W	
R127	1-247-863-00	CARBON	22K	5%	1/6W	
R128	1-247-863-00	CARBON	22K	5%	1/6W	
R129	1-247-863-00	CARBON	22K	5%	1/6W	
R130	1-247-839-00	CARBON	2.2K	5%	1/6W	
R132	1-247-855-00	CARBON	10K	5%	1/6W	
R133	1-247-859-00	CARBON	15K	5%	1/6W	
R134	1-247-840-00	CARBON	2.4K	5%	1/6W	
R135	1-247-824-00	CARBON	510	5%	1/6W	
R136	1-247-855-00	CARBON	10K	5%	1/6W	
R137	1-247-855-00	CARBON	10K	5%	1/6W	
R138	1-247-822-00	CARBON	430	5%	1/6W	
R139	1-247-842-00	CARBON	3K	5%	1/6W	
R140	1-247-858-00	CARBON	13K	5%	1/6W	
R141	1-247-858-00	CARBON	13K	5%	1/6W	
R142	1-247-838-00	CARBON	2K	5%	1/6W	
R143	1-247-842-00	CARBON	3K	5%	1/6W	
R144	1-247-895-00	CARBON	470K	5%	1/6W	
R146	1-247-849-00	CARBON	5.6K	5%	1/6W	
R147	1-247-865-00	CARBON	27K	5%	1/6W	
R148	1-247-848-00	CARBON	5.1K	5%	1/6W	
R149	1-247-828-00	CARBON	750	5%	1/6W	
R150	1-247-814-00	CARBON	200	5%	1/6W	
R151	1-247-851-00	CARBON	6.8K	5%	1/6W	
R152	1-247-847-00	CARBON	4.7K	5%	1/6W	
R157	1-247-855-00	CARBON	10K	5%	1/6W	
R158	1-247-859-00	CARBON	15K	5%	1/6W	
R159	1-247-840-00	CARBON	2.4K	5%	1/6W	
R160	1-247-824-00	CARBON	510	5%	1/6W	
R161	1-247-855-00	CARBON	10K	5%	1/6W	
R162	1-247-843-00	CARBON	3.3K	5%	1/6W	
R163	1-247-855-00	CARBON	10K	5%	1/6W	
R164	1-247-855-00	CARBON	10K	5%	1/6W	
R165	1-247-842-00	CARBON	3K	5%	1/6W	
R166	1-247-822-00	CARBON	430	5%	1/6W	
R167	1-247-858-00	CARBON	13K	5%	1/6W	
R168	1-247-838-00	CARBON	2K	5%	1/6W	
R169	1-247-858-00	CARBON	13K	5%	1/6W	
R170	1-247-842-00	CARBON	3K	5%	1/6W	
R172	1-247-865-00	CARBON	27K	5%	1/6W	
R173	1-247-895-00	CARBON	470K	5%	1/6W	
R174	1-247-849-00	CARBON	5.6K	5%	1/6W	
R175	1-247-836-00	CARBON	1.6K	5%	1/6W	
R176	1-247-814-00	CARBON	200	5%	1/6W	
R177	1-247-848-00	CARBON	5.1K	5%	1/6W	
R178	1-247-828-00	CARBON	750	5%	1/6W	
R179 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R180	1-215-465-00	METAL	68K	1%	1/6W	
R181	1-215-446-00	METAL	11K	1%	1/6W	
R183	1-215-462-00	METAL	51K	1%	1/6W	
R184	1-215-462-00	METAL	51K	1%	1/6W	
R185	1-247-871-00	CARBON	47K	5%	1/6W	
R190	1-215-446-00	METAL	11K	1%	1/6W	
R191	1-215-465-00	METAL	68K	1%	1/6W	
R194	1-247-872-00	CARBON	51K	5%	1/6W	
R200	1-247-872-00	CARBON	51K	5%	1/6W	
R205	1-247-855-00	CARBON	10K	5%	1/6W	
R206	1-247-859-00	CARBON	15K	5%	1/6W	
R217 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R218	1-247-871-00	CARBON	47K	5%	1/6W	
R220	1-247-875-00	CARBON	68K	5%	1/6W	
R221	1-247-850-00	CARBON	6.2K	5%	1/6W	
R222	1-247-863-00	CARBON	22K	5%	1/6W	
R223	1-247-831-00	CARBON	1K	5%	1/6W	
R224	1-247-887-00	CARBON	220K	5%	1/6W	
R225	1-247-842-00	CARBON	3K	5%	1/6W	
R226	1-247-879-00	CARBON	100K	5%	1/6W	
R227	1-247-855-00	CARBON	10K	5%	1/6W	
R228	1-247-879-00	CARBON	100K	5%	1/6W	
R229	1-247-831-00	CARBON	1K	5%	1/6W	
R230	1-247-887-00	CARBON	220K	5%	1/6W	
R231	1-247-842-00	CARBON	3K	5%	1/6W	
R232	1-247-848-00	CARBON	5.1K	5%	1/6W	
R233	1-247-848-00	CARBON	5.1K	5%	1/6W	
R234 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R235	1-247-871-00	CARBON	47K	5%	1/6W	
R236	1-247-871-00	CARBON	47K	5%	1/6W	
R237	1-247-839-00	CARBON	2.2K	5%	1/6W	
R239	1-247-863-00	CARBON	22K	5%	1/6W	
R240	1-247-871-00	CARBON	47K	5%	1/6W	
R241	1-247-875-00	CARBON	68K	5%	1/6W	
R243	1-247-850-00	CARBON	6.2K	5%	1/6W	
R244	1-247-855-00	CARBON	10K	5%	1/6W	
R245	1-247-855-00	CARBON	10K	5%	1/6W	
R246	1-247-855-00	CARBON	10K	5%	1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description				Remark
R247	1-247-855-00	CARBON	10K	5%	1/6W	
R248	1-247-863-00	CARBON	22K	5%	1/6W	
R249	1-247-855-00	CARBON	10K	5%	1/6W	
R253	1-247-855-00	CARBON	10K	5%	1/6W	
R255	1-247-867-00	CARBON	33K	5%	1/6W	
R256	1-247-863-00	CARBON	22K	5%	1/6W	
R262	1-247-851-00	CARBON	6.8K	5%	1/6W	
R263	1-247-823-00	CARBON	470	5%	1/6W	
R264	1-247-861-00	CARBON	18K	5%	1/6W	
R265	1-247-861-00	CARBON	18K	5%	1/6W	
R266	1-247-807-00	CARBON	100	5%	1/6W	
R267	1-215-442-00	METAL	7.5K	1%	1/6W	
R268	1-247-843-00	CARBON	3.3K	5%	1/6W	
R269	1-247-855-00	CARBON	10K	5%	1/6W	
R270	1-247-855-00	CARBON	10K	5%	1/6W	
R271	1-247-875-00	CARBON	68K	5%	1/6W	
R272	1-247-871-00	CARBON	47K	5%	1/6W	
R273	1-247-871-00	CARBON	47K	5%	1/6W	
R275	1-247-851-00	CARBON	6.8K	5%	1/6W	
R276	1-247-823-00	CARBON	470	5%	1/6W	
R277	1-247-861-00	CARBON	18K	5%	1/6W	
R278	1-247-861-00	CARBON	18K	5%	1/6W	
R279	1-247-807-00	CARBON	100	5%	1/6W	
R280	1-215-421-00	METAL	1K	1%	1/6W	
R281	1-247-844-00	CARBON	3.6K	5%	1/6W	
R282	1-247-855-00	CARBON	10K	5%	1/6W	
R283	1-247-855-00	CARBON	10K	5%	1/6W	
R284	1-247-869-00	CARBON	39K	5%	1/6W	
R285	1-247-871-00	CARBON	47K	5%	1/6W	
R286	1-247-871-00	CARBON	47K	5%	1/6W	
R288	1-215-453-00	METAL	22K	1%	1/6W	
R289	1-215-453-00	METAL	22K	1%	1/6W	
R290	1-247-807-00	CARBON	100	5%	1/6W	
R291	1-247-831-00	CARBON	1K	5%	1/6W	
R293	1-247-867-00	CARBON	33K	5%	1/6W	
R296	1-247-867-00	CARBON	33K	5%	1/6W	
R297	1-247-848-00	CARBON	5.1K	5%	1/6W	
R298	1-247-863-00	CARBON	22K	5%	1/6W	
R299	1-247-863-00	CARBON	22K	5%	1/6W	
R300	1-247-863-00	CARBON	22K	5%	1/6W	
R301	1-247-855-00	CARBON	10K	5%	1/6W	
R302	1-247-855-00	CARBON	10K	5%	1/6W	
R303	1-247-871-00	CARBON	47K	5%	1/6W	
R304	1-247-855-00	CARBON	10K	5%	1/6W	
R308	1-247-863-00	CARBON	22K	5%	1/6W	
R310	1-247-847-00	CARBON	4.7K	5%	1/6W	
R311	1-247-855-00	CARBON	10K	5%	1/6W	
R312	1-247-843-00	CARBON	3.3K	5%	1/6W	
R313	1-247-855-00	CARBON	10K	5%	1/6W	
R315	1-247-855-00	CARBON	10K	5%	1/6W	
R322	1-247-879-00	CARBON	100K	5%	1/6W	
R323	1-247-839-00	CARBON	2.2K	5%	1/6W	
R324	1-247-871-00	CARBON	47K	5%	1/6W	

Ref.No	Part No.	Description				Remark
R325	1-247-879-00	CARBON	100K	5%	1/6W	
R326	1-247-831-00	CARBON	1K	5%	1/6W	
R327	1-247-859-00	CARBON	15K	5%	1/6W	
R330	1-247-838-00	CARBON	2K	5%	1/6W	
R332	1-247-862-00	CARBON	20K	5%	1/6W	
R338	1-247-862-00	CARBON	20K	5%	1/6W	
R343	1-247-807-00	CARBON	100	5%	1/6W	
R344	1-247-807-00	CARBON	100	5%	1/6W	
R345	1-247-820-00	CARBON	360	5%	1/6W	
R346	1-247-820-00	CARBON	360	5%	1/6W	
R350	1-247-843-00	CARBON	3.3K	5%	1/6W	
R351	1-247-843-00	CARBON	3.3K	5%	1/6W	
R352	1-247-857-00	CARBON	12K	5%	1/6W	
R601	1-247-871-00	CARBON	47K	5%	1/6W	
R701	1-247-855-00	CARBON	10K	5%	1/6W	
R702	1-247-855-00	CARBON	10K	5%	1/6W	
R703	1-247-847-00	CARBON	4.7K	5%	1/6W	
R706	1-247-843-00	CARBON	3.3K	5%	1/6W	
R707	1-247-847-00	CARBON	4.7K	5%	1/6W	
R708	1-247-843-00	CARBON	3.3K	5%	1/6W	
R711	1-247-867-00	CARBON	33K	5%	1/6W	
R712	1-247-867-00	CARBON	33K	5%	1/6W	
R713	1-247-855-00	CARBON	10K	5%	1/6W	
R714	1-247-867-00	CARBON	33K	5%	1/6W	
R715	1-247-867-00	CARBON	33K	5%	1/6W	
R716	1-247-855-00	CARBON	10K	5%	1/6W	
R718	1-247-849-00	CARBON	5.6K	5%	1/6W	
R719	1-247-849-00	CARBON	5.6K	5%	1/6W	
R720	1-247-849-00	CARBON	5.6K	5%	1/6W	
R721	1-247-849-00	CARBON	5.6K	5%	1/6W	
R722	1-247-867-00	CARBON	33K	5%	1/6W	
R724	1-247-867-00	CARBON	33K	5%	1/6W	
R725	1-247-855-00	CARBON	10K	5%	1/6W	
R726	1-247-867-00	CARBON	33K	5%	1/6W	
R727	1-247-867-00	CARBON	33K	5%	1/6W	
R728	1-247-855-00	CARBON	10K	5%	1/6W	
R729	1-247-839-00	CARBON	2.2K	5%	1/6W	
R730	1-247-813-00	CARBON	180	5%	1/6W	
R731	1-247-813-00	CARBON	180	5%	1/6W	
R732	1-247-867-00	CARBON	33K	5%	1/6W	
R734	1-247-812-00	CARBON	160	5%	1/6W	
R735	1-247-812-00	CARBON	160	5%	1/6W	
R736	1-247-867-00	CARBON	33K	5%	1/6W	
R737	1-247-821-00	CARBON	390	5%	1/6W	
R739	1-247-863-00	CARBON	22K	5%	1/6W	
R740	1-247-863-00	CARBON	22K	5%	1/6W	
R741	1-247-855-00	CARBON	10K	5%	1/6W	
R742	1-247-859-00	CARBON	15K	5%	1/6W	
R743	1-247-859-00	CARBON	15K	5%	1/6W	
R744	1-247-847-00	CARBON	4.7K	5%	1/6W	
R745	1-247-847-00	CARBON	4.7K	5%	1/6W	
R746	1-247-855-00	CARBON	10K	5%	1/6W	
R747	1-247-855-00	CARBON	10K	5%	1/6W	
R748	1-247-843-00	CARBON	3.3K	5%	1/6W	
R749	1-247-843-00	CARBON	3.3K	5%	1/6W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R750	1-247-871-00	CARBON	47K	5%	1/6W	
R751	1-247-871-00	CARBON	47K	5%	1/6W	
R754	1-247-903-00	CARBON	1M	5%	1/6W	
R755	1-247-903-00	CARBON	1M	5%	1/6W	
R756	1-247-839-00	CARBON	2.2K	5%	1/6W	
R757	1-247-839-00	CARBON	2.2K	5%	1/6W	
R758	1-247-810-00	CARBON	130	5%	1/6W	
R759	1-247-810-00	CARBON	130	5%	1/6W	
R780	1-247-825-00	CARBON	560	5%	1/6W	
R781	1-247-825-00	CARBON	560	5%	1/6W	
R782	1-247-867-00	CARBON	33K	5%	1/6W	
R783	1-247-867-00	CARBON	33K	5%	1/6W	
R784	1-247-825-00	CARBON	560	5%	1/6W	
R785	1-247-825-00	CARBON	560	5%	1/6W	
R786	1-247-855-00	CARBON	10K	5%	1/6W	
R787	1-247-855-00	CARBON	10K	5%	1/6W	
R788 ⚠	1-247-831-00	CARBON	1K	5%	1/6W	
R789	1-247-896-00	CARBON	510K	5%	1/6W	
R790	1-247-855-00	CARBON	10K	5%	1/6W	
R793	1-247-855-00	CARBON	10K	5%	1/6W	
R794	1-247-847-00	CARBON	4.7K	5%	1/6W	
R795	1-247-847-00	CARBON	4.7K	5%	1/6W	
R796	1-247-839-00	CARBON	2.2K	5%	1/6W	
R797	1-247-839-00	CARBON	2.2K	5%	1/6W	
R798	1-247-803-00	CARBON	68	5%	1/6W	
R799	1-247-831-00	CARBON	1K	5%	1/6W	
R800	1-247-831-00	CARBON	1K	5%	1/6W	
R801 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R802 ⚠	1-247-815-00	CARBON	220	5%	1/6W	
R803	1-247-875-00	CARBON	68K	5%	1/6W	
R804	1-247-879-00	CARBON	100K	5%	1/6W	
R805	1-247-879-00	CARBON	100K	5%	1/6W	
R806	1-247-855-00	CARBON	10K	5%	1/6W	
R807	1-247-815-00	CARBON	220	5%	1/6W	
R808	1-247-815-00	CARBON	220	5%	1/6W	
R809	1-247-813-00	CARBON	180	5%	1/6W	
R810	1-247-873-00	CARBON	56K	5%	1/6W	
R811	1-247-855-00	CARBON	10K	5%	1/6W	
R812	1-247-855-00	CARBON	10K	5%	1/6W	
R813	1-247-855-00	CARBON	10K	5%	1/6W	
R814	1-247-855-00	CARBON	10K	5%	1/6W	
R815	1-247-855-00	CARBON	10K	5%	1/6W	
R816	1-247-895-00	CARBON	470K	5%	1/6W	
R817	1-247-879-00	CARBON	100K	5%	1/6W	
R818	1-247-895-00	CARBON	470K	5%	1/6W	
R819	1-247-895-00	CARBON	470K	5%	1/6W	
R820	1-247-895-00	CARBON	470K	5%	1/6W	
R821	1-247-895-00	CARBON	470K	5%	1/6W	
R828	1-247-887-00	CARBON	220K	5%	1/6W	

VARIABLE RESISTOR

Ref.No	Part No.	Description	Remark
RV005	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV006	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV010	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV012	1-228-996-00	RES, ADJ, METAL GLAZE 47K	
RV013	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV014	1-228-990-00	RES, ADJ, METAL GLAZE 1K	
RV015	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K	
RV016	1-228-990-00	RES, ADJ, METAL GLAZE 1K	
RV017	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K	
RV018	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV019	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K	
RV020	1-228-997-00	RES, ADJ, METAL GLAZE 100K	
RV021	1-228-997-00	RES, ADJ, METAL GLAZE 100K	
RV022	1-228-997-00	RES, ADJ, METAL GLAZE 100K	
RV023	1-228-997-00	RES, ADJ, METAL GLAZE 100K	

Q DET COIL

T002	1-404-545-11	COIL, Q DET
T004	1-404-545-11	COIL, Q DET
T006	1-404-544-11	COIL, Q DET
T008	1-404-544-11	COIL, Q DET

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The parts for AF-3 board whose end of part No. is -14 or -15.

♠:A-6713-200-A AF-3 BOARD, COMPLETE
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♠:3-684-072-01 LID, BOTTOM, AF SHIELD CASE(S)
♠:3-684-087-01 CASE (S) (MAIN), SHIELD, AF
3-701-748-00 CLAMP

BPF

BPF001	1-235-367-11	B.P.F
BPF002	1-235-367-11	B.P.F
BPF003	1-235-366-11	B.P.F
BPF004	1-235-366-11	B.P.F

CAPACITOR

C001	1-123-356-00	ELECT	10MF	20%	16V
C002	1-161-025-00	CERAMIC	0.1MF	10%	25V
C003	1-161-025-00	CERAMIC	0.1MF	10%	25V
C004	1-161-025-00	CERAMIC	0.1MF	10%	25V
C006	1-161-025-00	CERAMIC	0.1MF	10%	25V
C007	1-123-332-00	ELECT	47MF	20%	16V
C008	1-161-025-00	CERAMIC	0.1MF	10%	25V
C010	1-123-306-00	ELECT	47MF	20%	10V
C011	1-123-306-00	ELECT	47MF	20%	10V
C012	1-161-025-00	CERAMIC	0.1MF	10%	25V
C013	1-123-306-00	ELECT	47MF	20%	6.3V
C015	1-161-025-00	CERAMIC	0.1MF	10%	25V
C016	1-102-519-00	CERAMIC	36PF	5%	50V
C017	1-123-332-00	ELECT	47MF	20%	16V
C018	1-161-025-00	CERAMIC	0.1MF	10%	25V
C020	1-161-025-00	CERAMIC	0.1MF	10%	25V
C021	1-161-025-00	CERAMIC	0.1MF	10%	25V
C023	1-123-356-00	ELECT	10MF	20%	16V
C025	1-102-973-00	CERAMIC	100PF	5%	50V
C026	1-101-884-00	CERAMIC	56PF	5%	50V

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

AF-3

Ref.No	Part NO.	Description			Remark
C027	1-161-025-00	CERAMIC	0.1MF	10%	25V
C028	1-123-381-00	ELECT	2.2MF	20%	50V
C030	1-123-381-00	ELECT	2.2MF	20%	50V
C031	1-161-025-00	CERAMIC	0.1MF	10%	25V
C032	1-123-332-00	ELECT	47MF	20%	16V
C033	1-161-025-00	CERAMIC	0.1MF	10%	25V
C034	1-102-519-00	CERAMIC	36PF	5%	50V
C035	1-161-025-00	CERAMIC	0.1MF	10%	25V
C036	1-161-025-00	CERAMIC	0.1MF	10%	25V
C038	1-102-973-00	CERAMIC	100PF	5%	50V
C039	1-101-884-00	CERAMIC	56PF	5%	50V
C041	1-123-356-00	ELECT	10MF	20%	16V
C042	1-123-333-00	ELECT	100MF	20%	16V
C046	1-161-025-00	CERAMIC	0.1MF	10%	25V
C048	1-123-333-00	ELECT	100MF	20%	16V
C050	1-123-332-00	ELECT	47MF	20%	16V
C054	1-102-822-00	CERAMIC	390PF	5%	50V
C055	1-161-025-00	CERAMIC	0.1MF	10%	25V
C057	1-102-973-00	CERAMIC	100PF	5%	50V
C058	1-101-884-00	CERAMIC	56PF	5%	50V
C059	1-123-356-00	ELECT	10MF	20%	16V
C060	1-123-381-00	ELECT	2.2MF	20%	50V
C062	1-123-381-00	ELECT	2.2MF	20%	50V
C063	1-161-025-00	CERAMIC	0.1MF	10%	25V
C065	1-123-332-00	ELECT	47MF	20%	16V
C069	1-161-025-00	CERAMIC	0.1MF	10%	25V
C072	1-102-822-00	CERAMIC	390PF	5%	50V
C073	1-161-025-00	CERAMIC	0.1MF	10%	25V
C075	1-102-973-00	CERAMIC	100PF	5%	50V
C076	1-101-884-00	CERAMIC	56PF	5%	50V
C080	1-161-025-00	CERAMIC	0.1MF	10%	25V
C081	1-106-178-00	MYLAR	0.0018MF	5%	50V
C082	1-106-182-00	MYLAR	0.0027MF	5%	50V
C083	1-106-186-00	MYLAR	0.0039MF	5%	50V
C084	1-123-356-00	ELECT	10MF	20%	16V
C086	1-123-307-00	ELECT	100MF	20%	10V
C087	1-161-013-00	CERAMIC	0.01MF	10%	25V
C088	1-123-307-00	ELECT	100MF	20%	10V
C089	1-123-332-00	ELECT	47MF	20%	16V
C090	1-123-332-00	ELECT	47MF	20%	16V
C091	1-123-356-00	ELECT	10MF	20%	16V
C092	1-102-958-00	CERAMIC	20PF	5%	50V
C093	1-130-485-00	MYLAR	0.015MF	5%	50V
C095	1-130-485-00	MYLAR	0.015MF	5%	50V
C096	1-130-494-11	MYLAR	0.082MF	5%	50V
C098	1-130-475-00	MYLAR	0.0022MF	5%	50V
C099	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C100	1-130-469-00	MYLAR	680PF	5%	50V
C101	1-108-590-00	MYLAR	0.03MF	5%	50V
C102	1-131-383-00	TANTALUM	10MF	10%	6.3V
C103	1-131-347-00	TANTALUM	1MF	20%	16V
C105	1-123-307-00	ELECT	100MF	20%	10V
C106	1-161-013-00	CERAMIC	0.01MF	10%	25V
C107	1-130-497-00	MYLAR	0.15MF	5%	50V
C109	1-106-186-00	MYLAR	0.0039MF	5%	50V
C110	1-106-182-00	MYLAR	0.0027MF	5%	50V
C111	1-106-178-00	MYLAR	0.0018MF	5%	50V
C115	1-123-356-00	ELECT	10MF	20%	16V
C116	1-123-307-00	ELECT	100MF	20%	10V
C117	1-123-332-00	ELECT	47MF	20%	16V
C118	1-123-332-00	ELECT	47MF	20%	16V
C119	1-102-958-00	CERAMIC	20PF	5%	50V
C120	1-130-485-00	MYLAR	0.015MF	5%	50V
C121	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C122	1-130-469-00	MYLAR	680PF	5%	50V
C123	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C124	1-130-497-00	MYLAR	0.15MF	5%	50V
C125	1-131-383-00	TANTALUM	10MF	10%	6.3V
C126	1-131-347-00	TANTALUM	1MF	20%	16V
C127	1-108-590-00	MYLAR	0.03MF	5%	50V
C128	1-130-475-00	MYLAR	0.0022MF	5%	50V
C130	1-130-494-11	MYLAR	0.082MF	5%	50V
C131	1-130-485-00	MYLAR	0.015MF	5%	50V
C132	1-123-356-00	ELECT	10MF	20%	16V
C133	1-161-013-00	CERAMIC	0.01MF	10%	25V
C134	1-123-330-00	ELECT	22MF	20%	16V
C143	1-123-332-00	ELECT	47MF	20%	16V
C144	1-123-330-00	ELECT	22MF	20%	16V
C146	1-123-332-00	ELECT	47MF	20%	16V
C147	1-123-330-00	ELECT	22MF	20%	16V
C150	1-123-332-00	ELECT	47MF	20%	16V
C151	1-123-381-00	ELECT	2.2MF	20%	50V
C152	1-102-973-00	CERAMIC	100PF	5%	50V
C153	1-123-332-00	ELECT	47MF	20%	16V
C154	1-123-381-00	ELECT	2.2MF	20%	50V
C155	1-102-973-00	CERAMIC	100PF	5%	50V
C156	1-123-330-00	ELECT	22MF	20%	16V
C157	1-123-330-00	ELECT	22MF	20%	16V
C158	1-123-330-00	ELECT	22MF	20%	16V
C159	1-123-318-00	ELECT	33MF	20%	16V
C160	1-123-332-00	ELECT	47MF	20%	16V
C161	1-123-330-00	ELECT	22MF	20%	16V
C162	1-123-318-00	ELECT	33MF	20%	16V
C163	1-123-356-00	ELECT	10MF	20%	16V
C164	1-123-356-00	ELECT	10MF	20%	16V
C165	1-123-330-00	ELECT	22MF	20%	16V
C166	1-123-356-00	ELECT	10MF	20%	16V
C167	1-123-380-00	ELECT	1MF	20%	50V
C168	1-123-356-00	ELECT	10MF	20%	16V
C169	1-123-330-00	ELECT	22MF	20%	16V
C170	1-123-380-00	ELECT	1MF	20%	50V
C171	1-161-025-00	CERAMIC	0.1MF	10%	25V
C173	1-161-013-00	CERAMIC	0.01MF	10%	25V
C175	1-123-332-00	ELECT	47MF	20%	16V
C176	1-102-976-00	CERAMIC	180PF	5%	50V

When indicating parts by reference number, please include the board name.

Ref.No	Part NO.	Description			Remark
C177	1-161-013-00	CERAMIC	0.01MF	10%	25V
C178	1-102-522-00	CERAMIC	51PF	5%	50V
C179	1-102-978-00	CERAMIC	220PF	5%	50V
C180	1-102-978-00	CERAMIC	220PF	5%	50V
C181	1-161-013-00	CERAMIC	0.01MF	10%	25V
C182	1-123-332-00	ELECT	47MF	20%	16V
C183	1-123-332-00	ELECT	47MF	20%	16V
C184	1-102-529-00	CERAMIC	100PF	5%	50V
C185	1-123-332-00	ELECT	47MF	20%	16V
C186	1-123-332-00	ELECT	47MF	20%	16V
C187	1-161-025-00	CERAMIC	0.1MF	10%	25V
C189	1-161-025-00	CERAMIC	0.1MF	10%	25V
C190	1-123-332-00	ELECT	47MF	20%	16V
C191	1-161-025-00	CERAMIC	0.1MF	10%	25V
C192	1-123-332-00	ELECT	47MF	20%	16V
C193	1-102-529-00	CERAMIC	100PF	5%	50V
C194	1-123-332-00	ELECT	47MF	20%	16V
C195	1-123-332-00	ELECT	47MF	20%	16V
C196	1-123-332-00	ELECT	47MF	20%	16V
C197	1-102-625-61	CERAMIC	100PF	5%	50V
C198	1-161-013-00	CERAMIC	0.01MF	10%	25V
C199	1-102-517-00	CERAMIC	30PF	5%	50V
C200	1-102-531-00	CERAMIC	150PF	5%	50V
C201	1-102-531-00	CERAMIC	150PF	5%	50V
C202	1-161-013-00	CERAMIC	0.01MF	10%	25V
C203	1-161-013-00	CERAMIC	0.01MF	10%	25V
C209	1-123-356-00	ELECT	10MF	20%	16V
C211	1-161-025-00	CERAMIC	0.1MF	10%	25V
C213	1-123-332-00	ELECT	47MF	20%	16V
C216	1-123-381-00	ELECT	2.2MF	20%	50V
C217	1-123-381-00	ELECT	2.2MF	20%	50V
C221	1-123-330-00	ELECT	22MF	20%	16V
C222	1-123-330-00	ELECT	22MF	20%	16V
C223	1-102-936-00	CERAMIC	3PF	0.25PF	50V
C224	1-123-380-00	ELECT	1MF	20%	50V
C225	1-161-013-00	CERAMIC	0.01MF	10%	25V
C226	1-161-013-00	CERAMIC	0.01MF	10%	25V
C227	1-161-013-00	CERAMIC	0.01MF	10%	25V
C229	1-130-471-00	MYLAR	0.001MF	5%	50V
C232	1-130-471-00	MYLAR	0.001MF	5%	50V
C235	1-161-013-00	CERAMIC	0.01MF	10%	25V
C236	1-130-491-00	MYLAR	0.047MF	5%	50V
C237	1-130-491-00	MYLAR	0.047MF	5%	50V
C238	1-123-330-00	ELECT	22MF	20%	16V
C240	1-161-025-00	CERAMIC	0.1MF	10%	25V
C241	1-123-356-00	ELECT	10MF	20%	16V
C501	1-124-233-00	ELECT	10MF	20%	16V
C701	1-123-356-00	ELECT	10MF	20%	16V
C702	1-123-356-00	ELECT	10MF	20%	16V
C704	1-123-322-00	ELECT	330MF	20%	16V
C706	1-124-231-00	ELECT	4.7MF	20%	16V
C709	1-123-381-00	ELECT	2.2MF	20%	50V
C710	1-130-469-00	MYLAR	680PF	5%	50V
C711	1-130-469-00	MYLAR	680PF	5%	50V
C712	1-123-332-00	ELECT	47MF	20%	16V
C713	1-123-332-00	ELECT	47MF	20%	16V
C714	1-130-469-00	MYLAR	680PF	5%	50V
C715	1-130-469-00	MYLAR	680PF	5%	50V
C722	1-124-231-00	ELECT	4.7MF	20%	16V
C724	1-123-380-00	ELECT	1MF	20%	50V
C726	1-161-039-00	CERAMIC	0.001MF	10%	25V
C728	1-102-980-00	CERAMIC	270PF	5%	50V
C731	1-123-332-00	ELECT	47MF	20%	16V
C732	1-123-332-00	ELECT	47MF	20%	16V
C733	1-161-013-00	CERAMIC	0.01MF	10%	25V
C734	1-124-168-00	ELECT	100MF	20%	16V
C735	1-123-381-00	ELECT	2.2MF	20%	50V
C736	1-123-381-00	ELECT	2.2MF	20%	50V
C738	1-124-233-00	ELECT	10MF	20%	16V
C739	1-161-057-00	CERAMIC	0.033MF	10%	25V
C741	1-124-475-11	ELECT	470MF	20%	16V
C742	1-123-380-00	ELECT	1MF	20%	50V
C743	1-123-380-00	ELECT	1MF	20%	50V
C750	1-102-973-00	CERAMIC	100PF	5%	50V
C751	1-161-013-00	CERAMIC	0.01MF	10%	25V
C752	1-161-013-00	CERAMIC	0.01MF	10%	25V
C753	1-161-025-00	CERAMIC	0.1MF	10%	25V
C754	1-161-025-00	CERAMIC	0.1MF	10%	25V
C755	1-130-483-00	MYLAR	0.01MF	5%	50V
C756	1-130-475-00	MYLAR	0.0022MF	5%	50V
C757	1-130-495-00	MYLAR	0.1MF	5%	50V
C758	1-161-057-00	CERAMIC	0.033MF	10%	25V
C759	1-161-025-00	CERAMIC	0.1MF	10%	25V
C760	1-161-025-00	CERAMIC	0.1MF	10%	25V

CONNECTOR

CN001♠:	1-560-892-00	PIN, CONNECTOR 4P
CN002♠:	1-560-891-00	PIN, CONNECTOR 3P
CN003♠:	1-560-898-00	PIN, CONNECTOR 10P
CN004♠:	1-560-896-00	PIN, CONNECTOR 8P
CN005♠:	1-560-893-00	PIN, CONNECTOR 5P
CN006♠:	1-560-892-00	PIN, CONNECTOR 4P
CN007♠:	1-560-892-00	PIN, CONNECTOR 4P
CN008♠:	1-560-897-00	PIN, CONNECTOR 9P
CN009♠:	1-560-891-00	PIN, CONNECTOR 3P
CN011♠:	1-560-900-00	PIN, CONNECTOR 12P
CN012♠:	1-560-890-00	PIN, CONNECTOR 2P

DIODE

D007	8-719-911-19	DIODE 1SS119
D008	8-719-911-19	DIODE 1SS119
D011	8-719-000-12	DIODE MC931
D013	8-719-000-12	DIODE MC931
D017	=>8-719-911-19	DIODE 1SS119
D019	=>8-719-911-19	DIODE 1SS119
D025	8-719-100-34	DIODE RD5.6E-B1

When indicating parts by reference number, please include the board name.

AF-3

Ref.No	Part NO.	Description	Remark
D027	=>8-719-911-19	DIODE 1SS119	
D504	8-719-911-19	DIODE 1SS119	
D505	8-719-156-07	DIODE RD5.6E-B	
D508	8-719-162-07	DIODE RD6.2E-B	
D509	8-719-100-36	DIODE RD5.6E-B3	
D511	8-719-100-36	DIODE RD5.6E-B3	
D514	8-719-911-19	DIODE 1SS119	
D515	8-719-911-19	DIODE 1SS119	
D516	8-719-911-19	DIODE 1SS119	
D517	8-719-911-19	DIODE 1SS119	
D521	8-719-911-19	DIODE 1SS119	
D522	8-719-911-19	DIODE 1SS119	
D523	8-719-911-19	DIODE 1SS119	
D524	8-719-812-33	DIODE TLG123A	
D525	8-719-175-07	DIODE RD7.5E-B	
D527	8-719-911-19	DIODE 1SS119	
D528	8-719-911-19	DIODE 1SS119	
D529	8-719-911-19	DIODE 1SS119	
D530	8-719-911-19	DIODE 1SS119	
D531	8-719-911-19	DIODE 1SS119	
D532	8-719-911-19	DIODE 1SS119	
D850	8-719-911-19	DIODE 1SS119	

IC

IC001	8-759-324-12	IC HA12412	
IC002	8-759-324-12	IC HA12412	
IC003	8-759-101-67	IC UPC1167C2	
IC004	8-759-101-67	IC UPC1167C2	
IC005	8-759-103-93	IC UPC393C	
IC006	8-759-990-82	IC TL082CP	
IC007	8-759-990-82	IC TL082CP	
IC008	8-759-240-66	IC TC4066BP	
IC009	8-759-240-66	IC TC4066BP	
IC010	8-759-400-04	IC AN6120	
IC011	8-759-400-04	IC AN6120	
IC012	8-752-009-70	IC CX20097	
IC013	8-759-700-62	IC NJM4562D	
IC014	8-759-240-52	IC TC4052BP	
IC015	8-759-700-62	IC NJM4562D	
IC016	8-752-006-10	IC CX20061	
IC017	8-752-006-10	IC CX20061	
IC018	8-759-240-93	IC TC4093BP	
IC019	8-759-240-01	IC TC4001BP	
IC020	8-759-913-02	IC MB88201-167G	
IC021	8-752-006-10	IC CX20061	
IC022	8-752-006-10	IC CX20061	

COIL

Ref.No	Part NO.	Description	Remark
L001	1-408-421-00	MICRO INDUCTOR 100UH	
L002	1-408-413-00	MICRO INDUCTOR 22UH	
L003	1-407-163-XX	MICRO INDUCTOR 33UH	
L004	1-407-163-XX	MICRO INDUCTOR 33UH	
L005	1-407-163-XX	MICRO INDUCTOR 33UH	
L007	1-408-415-00	MICRO INDUCTOR 33UH	
L008	1-408-418-00	MICRO INDUCTOR 56UH	
L010	1-408-413-00	MICRO INDUCTOR 22UH	
L011	1-408-416-00	MICRO INDUCTOR 39UH	
L012	1-407-163-XX	MICRO INDUCTOR 33UH	
L013	1-408-413-00	MICRO INDUCTOR 22UH	
L014	1-408-413-00	MICRO INDUCTOR 22UH	
L015	1-408-413-00	MICRO INDUCTOR 22UH	
L016	1-408-413-00	MICRO INDUCTOR 22UH	
L020	1-408-417-00	MICRO INDUCTOR 47UH	
L021	1-408-417-00	MICRO INDUCTOR 47UH	
L022	1-408-417-00	MICRO INDUCTOR 47UH	
L026	1-408-421-00	MICRO INDUCTOR 100UH	
L027	1-408-421-00	MICRO INDUCTOR 100UH	
L028	1-408-429-00	MICRO INDUCTOR 470UH	

L.P.F

LPF001	1-235-365-11	L.P.F	
LPF002	1-235-365-11	L.P.F	

IC LINK

PS001	⚠.1-532-605-11	LINK, IC ICP-N10	

TRANSISTOR

Q001	⚠.8-729-113-33	TRANSISTOR 2SB733-4	
Q002	8-729-900-89	TRANSISTOR DTC144ES	
Q003	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q004	=>8-729-245-83	TRANSISTOR 2SC2458	
Q007	8-729-177-43	TRANSISTOR 2SD774	
Q008	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q009	8-729-603-30	TRANSISTOR 2SC403SP-3	
Q010	8-729-106-07	TRANSISTOR 2SK514-H	
Q012	8-729-900-37	TRANSISTOR DTC124EF	
Q015	8-729-106-07	TRANSISTOR 2SK514-H	
Q017	8-729-900-89	TRANSISTOR DTC144ES	
Q019	=>8-729-245-83	TRANSISTOR 2SC2458	
Q020	=>8-729-245-83	TRANSISTOR 2SC2458	
Q021	=>8-729-245-83	TRANSISTOR 2SC2458	
Q022	=>8-729-245-83	TRANSISTOR 2SC2458	
Q023	=>8-729-245-83	TRANSISTOR 2SC2458	
Q024	=>8-729-245-83	TRANSISTOR 2SC2458	
Q030	=>8-729-245-83	TRANSISTOR 2SC2458	
Q031	=>8-729-245-83	TRANSISTOR 2SC2458	
Q032	8-729-965-22	TRANSISTOR 2SC1652	
Q034	8-729-965-22	TRANSISTOR 2SC1652	
Q035	8-729-965-22	TRANSISTOR 2SC1652	
Q036	8-729-965-22	TRANSISTOR 2SC1652	
Q037	=>8-729-245-83	TRANSISTOR 2SC2458	
Q038	=>8-729-245-83	TRANSISTOR 2SC2458	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part NO.	Description	Remark
Q044	8-729-965-22	TRANSISTOR 2SC1652	
Q046	=>8-729-245-83	TRANSISTOR 2SC2458	
Q049	8-729-900-89	TRANSISTOR DTC144ES	
Q701	=>8-729-245-83	TRANSISTOR 2SC2458	
Q703	=>8-729-245-83	TRANSISTOR 2SC2458	
Q704	=>8-729-245-83	TRANSISTOR 2SC2458	
Q705	=>8-729-245-83	TRANSISTOR 2SC2458	
Q706	8-729-965-22	TRANSISTOR 2SC1652	
Q707	8-729-993-72	TRANSISTOR 2SA937	
Q708	=>8-729-245-83	TRANSISTOR 2SC2458	
Q709	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q710	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q715	=>8-729-245-83	TRANSISTOR 2SC2458	
Q716	=>8-729-245-83	TRANSISTOR 2SC2458	
Q720	8-729-117-54	TRANSISTOR 2SA1175	
Q721	=>8-729-245-83	TRANSISTOR 2SC2458	
Q722	=>8-729-245-83	TRANSISTOR 2SC2458	
Q723	8-729-900-33	TRANSISTOR DTC144EF	
Q724	=>8-729-245-83	TRANSISTOR 2SC2458	
Q725	8-729-117-54	TRANSISTOR 2SA1175	
Q728	=>8-729-245-83	TRANSISTOR 2SC2458	
Q729	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

R001	1-247-807-00	CARBON	100	5%	1/6W	
R002	1-247-847-00	CARBON	4.7K	5%	1/6W	
R003	1-247-831-00	CARBON	1K	5%	1/6W	
R006	1-247-823-00	CARBON	470	5%	1/6W	
R007	1-247-873-00	CARBON	56K	5%	1/6W	
R008	1-247-855-00	CARBON	10K	5%	1/6W	
R012	1-247-867-00	CARBON	33K	5%	1/6W	
R013	1-247-855-00	CARBON	10K	5%	1/6W	
R014	1-247-855-00	CARBON	10K	5%	1/6W	
R026	1-247-823-00	CARBON	470	5%	1/6W	
R027	1-247-861-00	CARBON	18K	5%	1/6W	
R028	1-247-831-00	CARBON	1K	5%	1/6W	
R029	1-247-825-00	CARBON	560	5%	1/6W	
R030	1-247-815-00	CARBON	220	5%	1/6W	
R031	1-247-822-00	CARBON	430	5%	1/6W	
R033	1-247-809-00	CARBON	120	5%	1/6W	
R034	1-247-819-00	CARBON	330	5%	1/6W	
R035	⚠ 1-212-853-00	FUSIBLE	6.8	5%	1/4W	F
R036	1-247-855-00	CARBON	10K	5%	1/6W	
R037	1-247-823-00	CARBON	470	5%	1/6W	
R038	1-247-855-00	CARBON	10K	5%	1/6W	
R039	1-247-855-00	CARBON	10K	5%	1/6W	
R040	1-247-855-00	CARBON	10K	5%	1/6W	
R042	1-247-855-00	CARBON	10K	5%	1/6W	
R043	1-247-855-00	CARBON	10K	5%	1/6W	
R044	1-247-823-00	CARBON	470	5%	1/6W	
R045	1-247-861-00	CARBON	18K	5%	1/6W	
R046	1-247-831-00	CARBON	1K	5%	1/6W	

Ref.No	Part NO.	Description				Remark
R047	1-247-825-00	CARBON	560	5%	1/6W	
R048	1-247-847-00	CARBON	4.7K	5%	1/6W	
R049	1-247-815-00	CARBON	220	5%	1/6W	
R050	1-247-822-00	CARBON	430	5%	1/6W	
R052	1-247-809-00	CARBON	120	5%	1/6W	
R054	1-247-855-00	CARBON	10K	5%	1/6W	
R055	1-247-855-00	CARBON	10K	5%	1/6W	
R056	1-247-855-00	CARBON	10K	5%	1/6W	
R057	1-247-855-00	CARBON	10K	5%	1/6W	
R061	1-247-831-00	CARBON	1K	5%	1/6W	
R069	1-247-839-00	CARBON	2.2K	5%	1/6W	
R071	1-247-855-00	CARBON	10K	5%	1/6W	
R072	1-247-879-00	CARBON	100K	5%	1/6W	
R073	1-247-851-00	CARBON	6.8K	5%	1/6W	
R083	1-247-822-00	CARBON	430	5%	1/6W	
R085	1-247-814-00	CARBON	200	5%	1/6W	
R087	1-247-855-00	CARBON	10K	5%	1/6W	
R088	1-247-855-00	CARBON	10K	5%	1/6W	
R089	1-247-855-00	CARBON	10K	5%	1/6W	
R090	1-247-823-00	CARBON	470	5%	1/6W	
R091	1-247-855-00	CARBON	10K	5%	1/6W	
R093	1-247-831-00	CARBON	1K	5%	1/6W	
R105	1-247-839-00	CARBON	2.2K	5%	1/6W	
R110	1-247-839-00	CARBON	2.2K	5%	1/6W	
R115	1-247-822-00	CARBON	430	5%	1/6W	
R116	1-247-814-00	CARBON	200	5%	1/6W	
R117	1-247-855-00	CARBON	10K	5%	1/6W	
R118	1-247-855-00	CARBON	10K	5%	1/6W	
R119	1-247-855-00	CARBON	10K	5%	1/6W	
R120	1-247-855-00	CARBON	10K	5%	1/6W	
R122	1-247-848-00	CARBON	5.1K	5%	1/6W	
R123	1-247-863-00	CARBON	22K	5%	1/6W	
R124	1-247-863-00	CARBON	22K	5%	1/6W	
R125	1-247-863-00	CARBON	22K	5%	1/6W	
R126	1-247-839-00	CARBON	2.2K	5%	1/6W	
R127	1-247-863-00	CARBON	22K	5%	1/6W	
R128	1-247-863-00	CARBON	22K	5%	1/6W	
R129	1-247-863-00	CARBON	22K	5%	1/6W	
R130	1-247-839-00	CARBON	2.2K	5%	1/6W	
R132	1-247-855-00	CARBON	10K	5%	1/6W	
R133	1-247-859-00	CARBON	15K	5%	1/6W	
R134	1-247-840-00	CARBON	2.4K	5%	1/6W	
R135	1-247-824-00	CARBON	510	5%	1/6W	
R136	1-247-855-00	CARBON	10K	5%	1/6W	
R137	1-247-855-00	CARBON	10K	5%	1/6W	
R138	1-247-822-00	CARBON	430	5%	1/6W	
R139	1-247-842-00	CARBON	3K	5%	1/6W	
R140	1-247-858-00	CARBON	13K	5%	1/6W	
R141	1-247-858-00	CARBON	13K	5%	1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

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Ref.No	Part NO.	Description				Remark
R142	1-247-838-00	CARBON	2K	5%	1/6W	
R143	1-247-842-00	CARBON	3K	5%	1/6W	
R144	1-247-895-00	CARBON	470K	5%	1/6W	
R146	1-247-853-00	CARBON	8.2K	5%	1/6W	
R147	1-247-865-00	CARBON	27K	5%	1/6W	
R148	1-247-848-00	CARBON	5.1K	5%	1/6W	
R149	1-247-828-00	CARBON	750	5%	1/6W	
R150	1-247-814-00	CARBON	200	5%	1/6W	
R151	1-247-851-00	CARBON	6.8K	5%	1/6W	
R152	1-247-847-00	CARBON	4.7K	5%	1/6W	
R157	1-247-855-00	CARBON	10K	5%	1/6W	
R158	1-247-859-00	CARBON	15K	5%	1/6W	
R159	1-247-840-00	CARBON	2.4K	5%	1/6W	
R160	1-247-824-00	CARBON	510	5%	1/6W	
R161	1-247-855-00	CARBON	10K	5%	1/6W	
R162	1-247-843-00	CARBON	3.3K	5%	1/6W	
R163	1-247-855-00	CARBON	10K	5%	1/6W	
R164	1-247-855-00	CARBON	10K	5%	1/6W	
R165	1-247-842-00	CARBON	3K	5%	1/6W	
R166	1-247-822-00	CARBON	430	5%	1/6W	
R167	1-247-858-00	CARBON	13K	5%	1/6W	
R168	1-247-838-00	CARBON	2K	5%	1/6W	
R169	1-247-858-00	CARBON	13K	5%	1/6W	
R170	1-247-842-00	CARBON	3K	5%	1/6W	
R172	1-247-865-00	CARBON	27K	5%	1/6W	
R173	1-247-895-00	CARBON	470K	5%	1/6W	
R174	1-247-853-00	CARBON	8.2K	5%	1/6W	
R175	1-247-836-00	CARBON	1.6K	5%	1/6W	
R176	1-247-814-00	CARBON	200	5%	1/6W	
R177	1-247-848-00	CARBON	5.1K	5%	1/6W	
R178	1-247-828-00	CARBON	750	5%	1/6W	
R179 ⚠.	1-247-815-00	CARBON	220	5%	1/6W	
R180	1-215-465-00	METAL	68K	1%	1/6W	
R181	1-215-446-00	METAL	11K	1%	1/6W	
R183	1-215-462-00	METAL	51K	1%	1/6W	
R184	1-215-462-00	METAL	51K	1%	1/6W	
R185	1-247-871-00	CARBON	47K	5%	1/6W	
R190	1-215-446-00	METAL	11K	1%	1/6W	
R191	1-215-465-00	METAL	68K	1%	1/6W	
R194	1-247-872-00	CARBON	51K	5%	1/6W	
R200	1-247-872-00	CARBON	51K	5%	1/6W	
R205	1-247-855-00	CARBON	10K	5%	1/6W	
R206	1-247-859-00	CARBON	15K	5%	1/6W	
R217 ⚠.	1-247-815-00	CARBON	220	5%	1/6W	
R218	1-247-871-00	CARBON	47K	5%	1/6W	
R220	1-247-875-00	CARBON	68K	5%	1/6W	
R221	1-247-850-00	CARBON	6.2K	5%	1/6W	
R222	1-247-863-00	CARBON	22K	5%	1/6W	
R223	1-247-831-00	CARBON	1K	5%	1/6W	
R224	1-247-887-00	CARBON	220K	5%	1/6W	
R225	1-247-842-00	CARBON	3K	5%	1/6W	
R226	1-247-879-00	CARBON	100K	5%	1/6W	
R227	1-247-855-00	CARBON	10K	5%	1/6W	
R228	1-247-879-00	CARBON	100K	5%	1/6W	
R229	1-247-831-00	CARBON	1K	5%	1/6W	
R230	1-247-887-00	CARBON	220K	5%	1/6W	
R231	1-247-842-00	CARBON	3K	5%	1/6W	
R232	1-247-848-00	CARBON	5.1K	5%	1/6W	
R233	1-247-848-00	CARBON	5.1K	5%	1/6W	
R234 ⚠.	1-247-815-00	CARBON	220	5%	1/6W	
R235	1-247-871-00	CARBON	47K	5%	1/6W	
R236	1-247-871-00	CARBON	47K	5%	1/6W	
R237	1-247-839-00	CARBON	2.2K	5%	1/6W	
R239	1-247-863-00	CARBON	22K	5%	1/6W	
R240	1-247-871-00	CARBON	47K	5%	1/6W	
R241	1-247-875-00	CARBON	68K	5%	1/6W	
R243	1-247-850-00	CARBON	6.2K	5%	1/6W	
R244	1-247-855-00	CARBON	10K	5%	1/6W	
R245	1-247-855-00	CARBON	10K	5%	1/6W	
R246	1-247-855-00	CARBON	10K	5%	1/6W	
R247	1-247-855-00	CARBON	10K	5%	1/6W	
R248	1-247-863-00	CARBON	22K	5%	1/6W	
R249	1-247-855-00	CARBON	10K	5%	1/6W	
R253	1-247-855-00	CARBON	10K	5%	1/6W	
R255	1-247-867-00	CARBON	33K	5%	1/6W	
R256	1-247-863-00	CARBON	22K	5%	1/6W	
R262	1-247-851-00	CARBON	6.8K	5%	1/6W	
R263	1-247-823-00	CARBON	470	5%	1/6W	
R264	1-247-861-00	CARBON	18K	5%	1/6W	
R265	1-247-861-00	CARBON	18K	5%	1/6W	
R266	1-247-807-00	CARBON	100	5%	1/6W	
R267	1-215-442-00	METAL	7.5K	1%	1/6W	
R268	1-247-843-00	CARBON	3.3K	5%	1/6W	
R269	1-247-855-00	CARBON	10K	5%	1/6W	
R270	1-247-855-00	CARBON	10K	5%	1/6W	
R271	1-247-875-00	CARBON	68K	5%	1/6W	
R272	1-247-871-00	CARBON	47K	5%	1/6W	
R273	1-247-871-00	CARBON	47K	5%	1/6W	
R275	1-247-851-00	CARBON	6.8K	5%	1/6W	
R276	1-247-823-00	CARBON	470	5%	1/6W	
R277	1-247-861-00	CARBON	18K	5%	1/6W	
R278	1-247-861-00	CARBON	18K	5%	1/6W	
R279	1-247-807-00	CARBON	100	5%	1/6W	
R280	1-215-421-00	METAL	1K	1%	1/6W	
R281	1-247-844-00	CARBON	3.6K	5%	1/6W	
R282	1-247-855-00	CARBON	10K	5%	1/6W	
R283	1-247-855-00	CARBON	10K	5%	1/6W	
R284	1-247-869-00	CARBON	39K	5%	1/6W	
R285	1-247-871-00	CARBON	47K	5%	1/6W	
R286	1-247-871-00	CARBON	47K	5%	1/6W	
R288	1-215-453-00	METAL	22K	1%	1/6W	
R289	1-215-453-00	METAL	22K	1%	1/6W	
R290	1-247-807-00	CARBON	100	5%	1/6W	
R291	1-247-831-00	CARBON	1K	5%	1/6W	
R293	1-247-867-00	CARBON	33K	5%	1/6W	
R296	1-247-867-00	CARBON	33K	5%	1/6W	

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Ref.No	Part NO.	Description				Remark
R297	1-247-848-00	CARBON	5.1K	5%	1/6W	
R298	1-247-863-00	CARBON	22K	5%	1/6W	
R299	1-247-863-00	CARBON	22K	5%	1/6W	
R300	1-247-863-00	CARBON	22K	5%	1/6W	
R301	1-247-855-00	CARBON	10K	5%	1/6W	
R302	1-247-855-00	CARBON	10K	5%	1/6W	
R303	1-247-871-00	CARBON	47K	5%	1/6W	
R304	1-247-855-00	CARBON	10K	5%	1/6W	
R308	1-247-863-00	CARBON	22K	5%	1/6W	
R310	1-247-847-00	CARBON	4.7K	5%	1/6W	
R311	1-247-855-00	CARBON	10K	5%	1/6W	
R312	1-247-843-00	CARBON	3.3K	5%	1/6W	
R313	1-247-855-00	CARBON	10K	5%	1/6W	
R322	1-247-879-00	CARBON	100K	5%	1/6W	
R323	1-247-839-00	CARBON	2.2K	5%	1/6W	
R324	1-247-871-00	CARBON	47K	5%	1/6W	
R325	1-247-879-00	CARBON	100K	5%	1/6W	
R326	1-247-831-00	CARBON	1K	5%	1/6W	
R327	1-247-859-00	CARBON	15K	5%	1/6W	
R330	1-247-831-00	CARBON	1K	5%	1/6W	
R332	1-247-862-00	CARBON	20K	5%	1/6W	
R338	1-247-862-00	CARBON	20K	5%	1/6W	
R343	1-247-807-00	CARBON	100	5%	1/6W	
R344	1-247-807-00	CARBON	100	5%	1/6W	
R345	1-247-820-00	CARBON	360	5%	1/6W	
R346	1-247-820-00	CARBON	360	5%	1/6W	
R351	1-247-843-00	CARBON	3.3K	5%	1/6W	
R352	1-247-857-00	CARBON	12K	5%	1/6W	
R601	1-247-871-00	CARBON	47K	5%	1/6W	
R701	1-247-855-00	CARBON	10K	5%	1/6W	
R702	1-247-855-00	CARBON	10K	5%	1/6W	
R703	1-247-847-00	CARBON	4.7K	5%	1/6W	
R706	1-247-843-00	CARBON	3.3K	5%	1/6W	
R707	1-247-847-00	CARBON	4.7K	5%	1/6W	
R708	1-247-843-00	CARBON	3.3K	5%	1/6W	
R712	1-247-867-00	CARBON	33K	5%	1/6W	
R713	1-247-855-00	CARBON	10K	5%	1/6W	
R714	1-247-867-00	CARBON	33K	5%	1/6W	
R715	1-247-867-00	CARBON	33K	5%	1/6W	
R716	1-247-855-00	CARBON	10K	5%	1/6W	
R718	1-247-849-00	CARBON	5.6K	5%	1/6W	
R719	1-247-849-00	CARBON	5.6K	5%	1/6W	
R720	1-247-849-00	CARBON	5.6K	5%	1/6W	
R721	1-247-849-00	CARBON	5.6K	5%	1/6W	
R722	1-247-867-00	CARBON	33K	5%	1/6W	
R724	1-247-867-00	CARBON	33K	5%	1/6W	
R725	1-247-855-00	CARBON	10K	5%	1/6W	
R726	1-247-867-00	CARBON	33K	5%	1/6W	
R727	1-247-867-00	CARBON	33K	5%	1/6W	
R728	1-247-855-00	CARBON	10K	5%	1/6W	
R729	1-247-839-00	CARBON	2.2K	5%	1/6W	
R730	1-247-813-00	CARBON	180	5%	1/6W	

Ref.No	Part NO.	Description				Remark
R731	1-247-813-00	CARBON	180	5%	1/6W	
R732	1-247-867-00	CARBON	33K	5%	1/6W	
R734	1-247-812-00	CARBON	160	5%	1/6W	
R735	1-247-812-00	CARBON	160	5%	1/6W	
R736	1-247-867-00	CARBON	33K	5%	1/6W	
R737	1-247-821-00	CARBON	390	5%	1/6W	
R739	1-247-863-00	CARBON	22K	5%	1/6W	
R740	1-247-863-00	CARBON	22K	5%	1/6W	
R741	1-247-843-00	CARBON	3.3K	5%	1/6W	
R746	1-247-863-00	CARBON	22K	5%	1/6W	
R748	1-247-843-00	CARBON	3.3K	5%	1/6W	
R757	1-247-825-00	CARBON	560	5%	1/6W	
R759	1-247-823-00	CARBON	470	5%	1/6W	
R779	1-247-855-00	CARBON	10K	5%	1/6W	
R780	1-247-825-00	CARBON	560	5%	1/6W	
R781	1-247-825-00	CARBON	560	5%	1/6W	
R782	1-247-867-00	CARBON	33K	5%	1/6W	
R783	1-247-867-00	CARBON	33K	5%	1/6W	
R784	1-247-825-00	CARBON	560	5%	1/6W	
R785	1-247-825-00	CARBON	560	5%	1/6W	
R787	1-247-855-00	CARBON	10K	5%	1/6W	
R788 ⚠.	1-247-831-00	CARBON	1K	5%	1/6W	
R789	1-247-896-00	CARBON	510K	5%	1/6W	
R790	1-247-855-00	CARBON	10K	5%	1/6W	
R793	1-247-855-00	CARBON	10K	5%	1/6W	
R794	1-247-847-00	CARBON	4.7K	5%	1/6W	
R795	1-247-847-00	CARBON	4.7K	5%	1/6W	
R796	1-247-839-00	CARBON	2.2K	5%	1/6W	
R797	1-247-839-00	CARBON	2.2K	5%	1/6W	
R798	1-247-803-00	CARBON	68	5%	1/6W	
R799	1-247-831-00	CARBON	1K	5%	1/6W	
R800	1-247-831-00	CARBON	1K	5%	1/6W	
R801 ⚠.	1-247-815-00	CARBON	220	5%	1/6W	
R802 ⚠.	1-247-815-00	CARBON	220	5%	1/6W	
R803	1-247-875-00	CARBON	68K	5%	1/6W	
R804	1-247-879-00	CARBON	100K	5%	1/6W	
R805	1-247-879-00	CARBON	100K	5%	1/6W	
R806	1-247-855-00	CARBON	10K	5%	1/6W	
R807	1-247-815-00	CARBON	220	5%	1/6W	
R808	1-247-815-00	CARBON	220	5%	1/6W	
R810	1-247-873-00	CARBON	56K	5%	1/6W	
R811	1-247-855-00	CARBON	10K	5%	1/6W	
R812	1-247-855-00	CARBON	10K	5%	1/6W	
R815	1-247-855-00	CARBON	10K	5%	1/6W	
R816	1-247-895-00	CARBON	470K	5%	1/6W	
R817	1-247-879-00	CARBON	100K	5%	1/6W	
R818	1-247-895-00	CARBON	470K	5%	1/6W	
R819	1-247-895-00	CARBON	470K	5%	1/6W	
R820	1-247-895-00	CARBON	470K	5%	1/6W	
R821	1-247-895-00	CARBON	470K	5%	1/6W	
R828	1-247-887-00	CARBON	220K	5%	1/6W	
R829	1-247-823-00	CARBON	470	5%	1/6W	
R830	1-247-819-00	CARBON	330	5%	1/6W	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

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Ref.No	Part NO.	Description				Remark
R831	1-247-831-00	CARBON	1K	5%	1/6W	
R832	1-247-871-00	CARBON	47K	5%	1/6W	
R833	1-247-867-00	CARBON	33K	5%	1/6W	
R834	1-247-848-00	CARBON	5.1K	5%	1/6W	
R835	1-247-847-00	CARBON	4.7K	5%	1/6W	
R836	1-247-855-00	CARBON	10K	5%	1/6W	
R837	1-247-855-00	CARBON	10K	5%	1/6W	
R838	1-247-831-00	CARBON	1K	5%	1/6W	
R839	1-247-831-00	CARBON	1K	5%	1/6W	
R840	1-247-831-00	CARBON	1K	5%	1/6W	
R841	1-247-831-00	CARBON	1K	5%	1/6W	
R844	1-247-855-00	CARBON	10K	5%	1/6W	
R845	1-247-819-00	CARBON	330	5%	1/6W	
R846	1-247-829-00	CARBON	820	5%	1/6W	

VARIABLE RESISTOR

Ref.No	Part NO.	Description
RV005	1-228-996-00	RES, ADJ, METAL GLAZE 47K
RV006	1-228-996-00	RES, ADJ, METAL GLAZE 47K
RV010	1-228-996-00	RES, ADJ, METAL GLAZE 47K
RV012	1-228-996-00	RES, ADJ, METAL GLAZE 47K
RV013	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K
RV014	1-228-990-00	RES, ADJ, METAL GLAZE 1K
RV015	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV016	1-228-990-00	RES, ADJ, METAL GLAZE 1K
RV017	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV018	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K
RV019	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K
RV020	1-228-997-00	RES, ADJ, METAL GLAZE 100K
RV021	1-228-997-00	RES, ADJ, METAL GLAZE 100K
RV022	1-228-997-00	RES, ADJ, METAL GLAZE 100K
RV023	1-228-997-00	RES, ADJ, METAL GLAZE 100K

TRANSFORMER

Ref.No	Part NO.	Description
T002	1-404-545-11	COIL, Q DET
T004	1-404-545-11	COIL, Q DET
T006	1-404-544-11	COIL, Q DET
T008	1-404-544-11	COIL, Q DET

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♠:A-6713-203-A AM-5 BOARD, COMPLETE
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♠:3-684-075-01 CASE (MAIN), SHIELD, AM
♠:3-684-076-01 LID, UPPER, AM SHIELD CASE
♠:3-684-077-03 LID, BOTTOM, AM SHIELD CASE

CAPACITOR

Ref.No	Part NO.	Description				Remark
C501	1-123-356-00	ELECT	10MF	20%	16V	
C505	1-123-330-00	ELECT	22MF	20%	16V	
C506	1-123-333-00	ELECT	100MF	20%	16V	
C507	1-123-333-00	ELECT	100MF	20%	16V	
C508	1-123-369-00	ELECT	4.7MF	20%	25V	
C509	1-123-369-00	ELECT	4.7MF	20%	25V	
C510	1-130-497-00	MYLAR	0.15MF	5%	50V	
C511	1-130-486-51	MYLAR	0.018MF	5%	50V	
C512	1-123-333-00	ELECT	100MF	20%	16V	
C513	1-123-379-00	ELECT	0.47MF	20%	50V	
C514	1-123-330-00	ELECT	22MF	20%	16V	
C515	1-102-111-00	CERAMIC	270PF	10%	50V	
C516	1-123-382-00	ELECT	3.3MF	20%	50V	
C517	1-130-507-51	MYLAR	0.0018MF	10%	50V	
C518	1-123-318-00	ELECT	33MF	20%	10V	
C519	1-130-516-51	MYLAR	0.01MF	10%	50V	
C520	1-123-382-00	ELECT	3.3MF	20%	50V	
C521	1-123-369-00	ELECT	4.7MF	20%	25V	
C522	1-123-333-00	ELECT	100MF	20%	16V	
C524	1-127-475-00	ELECT(SOLID)	0.22MF	5%	25V	
C525	1-130-502-00	MYLAR	680PF	10%	50V	
C526	1-123-332-00	ELECT	47MF	20%	16V	
C527	1-130-479-00	MYLAR	0.0047MF	5%	50V	
C528	1-130-477-00	MYLAR	0.0033MF	5%	50V	
C529	1-129-709-00	FILM	0.0039MF	10%	630V	
C530	1-102-108-00	CERAMIC	150PF	10%	50V	
C531	1-123-333-00	ELECT	100MF	20%	16V	
C533	1-136-155-00	MYLAR	0.015MF	10%	50V	
C534	1-123-332-00	ELECT	47MF	20%	16V	
C535	1-102-111-00	CERAMIC	270PF	10%	50V	
C536	1-123-379-00	ELECT	0.47MF	20%	50V	
C537	1-123-333-00	ELECT	100MF	20%	16V	
C539	1-123-356-00	ELECT	10MF	20%	16V	

CONNECTOR

Ref.No	Part NO.	Description
CN501♠:	1-560-893-00	PIN, CONNECTOR 5P
CN502♠:	1-560-893-00	PIN, CONNECTOR 5P
CN503♠:	1-564-030-00	PIN, CONNECTOR 5P

TRIMMER

Ref.No	Part NO.	Description
CT501	1-141-215-00	CAP, TRIMAR

DIODE

Ref.No	Part NO.	Description
D506	8-719-911-19	DIODE 1SS119
D507	=>8-719-200-02	DIODE 10E2
D508	8-719-100-16	DIODE RD3.3E-B1

IC

Ref.No	Part NO.	Description
IC501	8-759-800-79	IC LA7048

COIL

Ref.No	Part NO.	Description
L501	1-407-963-00	MICRO INDUCTOR 15MMH
L502	1-407-508-00	MICRO INDUCTOR 22MMH
L503	1-407-710-00	MICRO INDUCTOR 270UH
L504	1-407-508-00	MICRO INDUCTOR 22MMH

TRANSISTOR

Ref.No	Part NO.	Description
Q501	8-729-988-12	TRANSISTOR 2SA881
Q502	=>8-729-245-83	TRANSISTOR 2SC2458
Q504	8-729-967-32	TRANSISTOR 2SC2673
Q505	8-729-663-47	TRANSISTOR 2SC945-P
Q506	8-729-663-47	TRANSISTOR 2SC945-P
Q507	=>8-729-204-83	TRANSISTOR 2SA1048-GR
Q508	=>8-729-245-83	TRANSISTOR 2SC2458
Q509	=>8-729-245-83	TRANSISTOR 2SC2458
Q510	=>8-729-245-83	TRANSISTOR 2SC2458
Q511	=>8-729-245-83	TRANSISTOR 2SC2458

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
Q512	=>8-729-245-83	TRANSISTOR 2SC2458				
Q513	=>8-729-245-83	TRANSISTOR 2SC2458				

RESISTOR

Ref.No	Part No.	Description				Remark
R503	1-247-839-00	CARBON	2.2K	5%	1/6W	
R504	1-247-863-00	CARBON	22K	5%	1/6W	
R505	1-247-871-00	CARBON	47K	5%	1/6W	
R506 ⚠	1-247-660-00	CARBON	82	5%	1/4W	F
R507	1-247-847-00	CARBON	4.7K	5%	1/6W	
R508	1-247-867-00	CARBON	33K	5%	1/6W	
R509	1-247-847-00	CARBON	4.7K	5%	1/6W	
R510	1-247-855-00	CARBON	10K	5%	1/6W	
R511	1-247-867-00	CARBON	33K	5%	1/6W	
R512 ⚠	1-247-819-00	CARBON	330	5%	1/6W	
R513	1-247-855-00	CARBON	10K	5%	1/6W	
R514	1-247-903-00	CARBON	1M	5%	1/6W	
R515	1-247-849-00	CARBON	5.6K	5%	1/6W	
R516	1-247-819-00	CARBON	330	5%	1/6W	
R517	1-210-825-00	SOLID	3.3M	5%	1/4W	
R518	1-247-851-00	CARBON	6.8K	5%	1/6W	
R519	1-247-859-00	CARBON	15K	5%	1/6W	
R520	1-247-819-00	CARBON	330	5%	1/6W	
R521	1-247-891-00	CARBON	330K	5%	1/6W	
R522	1-247-883-00	CARBON	150K	5%	1/6W	
R524	1-247-783-00	CARBON	10	5%	1/6W	
R526	1-247-863-00	CARBON	22K	5%	1/6W	
R528	1-247-853-00	CARBON	8.2K	5%	1/6W	
R530	1-247-849-00	CARBON	5.6K	5%	1/6W	
R531	1-247-829-00	CARBON	820	5%	1/6W	
R532	1-247-862-00	CARBON	20K	5%	1/6W	
R533 ⚠	1-246-980-00	CARBON	3.3	5%	1/8W	F
R534	1-247-839-00	CARBON	2.2K	5%	1/6W	
R535	1-247-839-00	CARBON	2.2K	5%	1/6W	
R536	1-247-849-00	CARBON	5.6K	5%	1/6W	
R537	1-247-855-00	CARBON	10K	5%	1/6W	
R538	1-247-863-00	CARBON	22K	5%	1/6W	
R539	1-247-831-00	CARBON	1K	5%	1/6W	
R540	1-247-838-00	CARBON	2K	5%	1/6W	
R541	1-247-877-00	CARBON	82K	5%	1/6W	
R542	1-247-865-00	CARBON	27K	5%	1/6W	
R543	1-247-871-00	CARBON	47K	5%	1/6W	
R545	1-247-871-00	CARBON	47K	5%	1/6W	
R546	1-247-841-00	CARBON	2.7K	5%	1/6W	
R547	1-247-863-00	CARBON	22K	5%	1/6W	
R548	1-247-843-00	CARBON	3.3K	5%	1/6W	
R550	1-247-875-00	CARBON	68K	5%	1/6W	
R551	1-247-855-00	CARBON	10K	5%	1/6W	
R552	1-247-783-00	CARBON	10	5%	1/6W	
R561	1-247-840-00	CARBON	2.4K	5%	1/6W	
R562	1-247-855-00	CARBON	10K	5%	1/6W	
R563	1-247-895-00	CARBON	470K	5%	1/6W	

VARIABLE RESISTOR

Ref.No	Part No.	Description	Remark
RV501	1-228-748-00	RES, ADJ, CARBON 10K	
RV502 ⚠	1-228-989-00	RES, ADJ, METAL GLAZE 470	
RV503	1-228-751-00	RES, ADJ, CARBON 100K	

TRANSFORMER

Ref.No	Part No.	Description	Remark
T501	1-433-237-00	TRANSFORMER, OSCILLATOR	

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♠:A-6715-224-B SS-28 BOARD, COMPLETE

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CAPACITOR

Ref.No	Part No.	Description				Remark
C001	1-123-380-00	ELECT	1MF	20%	50V	
C002	1-123-356-00	ELECT	10MF	20%	16V	
C003	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C004	1-123-333-00	ELECT	100MF	20%	16V	
C005	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C006	1-123-318-00	ELECT	33MF	20%	10V	
C007	1-123-369-00	ELECT	4.7MF	20%	25V	
C008	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C009	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C301	1-123-382-00	ELECT	3.3MF	20%	50V	
C302	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C305	1-123-382-00	ELECT	3.3MF	20%	50V	
C306	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C307	1-130-482-00	MYLAR	0.0082MF	5%	50V	
C308	1-130-516-00	MYLAR	0.01MF	10%	50V	
C309	1-130-516-00	MYLAR	0.01MF	10%	50V	
C310	1-161-054-00	CERAMIC	0.018MF	10%	25V	
C311	1-161-054-00	CERAMIC	0.018MF	10%	25V	
C312	1-123-330-00	ELECT	22MF	20%	16V	
C314	1-161-054-00	CERAMIC	0.018MF	10%	25V	
C315	1-161-013-00	CERAMIC	0.01MF	10%	25V	
C316	1-123-356-00	ELECT	10MF	20%	16V	
C317	1-123-380-00	ELECT	1MF	20%	50V	
C318	1-102-125-00	CERAMIC	0.0047MF	10%	50V	
C319	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C320	1-124-429-00	ELECT	0.68MF	20%	50V	
C321	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C322	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C323	1-123-382-00	ELECT	3.3MF	20%	50V	
C324	1-131-409-00	ELECT(SOLID)	0.33MF	5%	25V	
C326	1-123-310-00	ELECT	470MF	20%	10V	
C327	1-123-308-00	ELECT	220MF	20%	10V	
C328	1-161-059-00	CERAMIC	0.047MF	10%	25V	
C329	1-131-357-00	TANTALUM	4.7MF	20%	25V	
C330	1-123-381-00	ELECT	2.2MF	20%	50V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

SS-28

Ref.No	Part No.	Description			Remark
C331	1-123-381-00	ELECT	2.2MF	20%	50V
C332	1-161-059-00	CERAMIC	0.047MF	10%	25V
C333	1-131-357-00	TANTALUM	4.7MF	20%	25V
C334	1-102-106-00	CERAMIC	100PF	10%	50V
C335	1-123-333-00	ELECT	100MF	20%	16V
C336	1-123-333-00	ELECT	100MF	20%	16V
C337	1-130-479-00	MYLAR	0.0047MF	5%	50V
C338	1-123-332-00	ELECT	47MF	20%	16V
C339	1-161-059-00	CERAMIC	0.047MF	10%	25V
C340	1-123-381-00	ELECT	2.2MF	20%	50V
C341	1-123-306-00	ELECT	47MF	20%	10V
C342	1-123-306-00	ELECT	47MF	20%	10V
C343	1-161-054-00	CERAMIC	0.018MF	10%	25V
C344	1-161-013-00	CERAMIC	0.01MF	10%	25V
C345	1-161-055-00	CERAMIC	0.022MF	10%	25V
C346	1-161-040-00	CERAMIC	0.0012MF	10%	25V
C347	1-161-054-00	CERAMIC	0.018MF	10%	25V
C348	1-161-013-00	CERAMIC	0.01MF	10%	25V
C349	1-123-382-00	ELECT	3.3MF	20%	50V
C350	1-127-479-00	ELECT(SOLID)	1MF	5%	25V
C351	1-161-057-00	CERAMIC	0.033MF	10%	25V
C352	1-123-330-00	ELECT	22MF	20%	16V
C353	1-161-057-00	CERAMIC	0.033MF	10%	25V
C354	1-123-369-00	ELECT	4.7MF	20%	25V
C355	1-161-013-00	CERAMIC	0.01MF	10%	25V
C356	1-123-332-00	ELECT	47MF	20%	16V
C357	1-161-013-00	CERAMIC	0.01MF	10%	25V
C358	1-161-013-00	CERAMIC	0.01MF	10%	25V
C359	1-123-369-00	ELECT	4.7MF	20%	25V
C360	1-123-333-00	ELECT	100MF	20%	16V
C361	1-161-013-00	CERAMIC	0.01MF	10%	25V
C362	1-130-493-00	MYLAR	0.068MF	5%	50V
C601	1-129-794-00	FILM	0.0033MF	5%	100V
C602	1-129-794-00	FILM	0.0033MF	5%	100V
C603	1-136-161-00	MYLAR	0.047MF	10%	50V
C604	1-136-157-00	MYLAR	0.022MF	10%	50V
C605	1-136-161-00	MYLAR	0.047MF	10%	50V
C606	1-123-330-00	ELECT	22MF	20%	16V
C607	1-123-331-00	ELECT	33MF	20%	25V
C608	1-123-331-00	ELECT	33MF	20%	25V
C610	1-123-380-00	ELECT	1MF	20%	50V
C611	1-123-306-00	ELECT	47MF	20%	10V
C612	1-161-059-00	CERAMIC	0.047MF	10%	25V
C801	1-102-529-00	CERAMIC	100PF	5%	50V
C802	1-102-529-00	CERAMIC	100PF	5%	50V
C901	1-101-004-00	CARAMIC	0.01MF		50V

FILTER

CF601	1-527-822-00	OSCILLATOR, CERAMIC

CONNECTOR

Ref.No	Part No.	Description	Remark
CN001	♦:1-560-891-00	PIN, CONNECTOR 3P	
CN002	♦:1-560-891-00	PIN, CONNECTOR 3P	
CN003	♦:1-560-892-00	PIN, CONNECTOR 4P	
CN004	♦:1-560-890-00	PIN, CONNECTOR 2P	
CN301	♦:1-560-892-00	PIN, CONNECTOR 4P	
CN302	♦:1-560-892-00	PIN, CONNECTOR 4P	
CN303	♦:1-560-890-00	PIN, CONNECTOR 2P	
CN304	♦:1-560-890-00	PIN, CONNECTOR 2P	
CN305	♦:1-560-897-00	PIN, CONNECTOR 9P	
CN306	♦:1-560-895-00	PIN, CONNECTOR 7P	
CN307	♦:1-560-466-00	PIN, CONNECTOR 3P	
CN308	♦:1-560-894-00	PIN, CONNECTOR 6P	
CN309	♦:1-560-892-00	PIN, CONNECTOR 4P	
CN601	♦:1-560-895-00	PIN, CONNECTOR 7P	
CN602	♦:1-560-897-00	PIN, CONNECTOR 9P	
CN603	♦:1-560-890-00	PIN, CONNECTOR 2P	
CN604	♦:1-560-890-00	PIN, CONNECTOR 2P	
CN605	♦:1-560-890-00	PIN, CONNECTOR 2P	
CN606	♦:1-560-892-00	PIN, CONNECTOR 4P	
CN607	♦:1-560-890-00	PIN, CONNECTOR 2P	
CN608	♦:1-560-892-00	PIN, CONNECTOR 4P	
CN609	♦:1-560-893-00	PIN, CONNECTOR 5P	
CN610	♦:1-560-891-00	PIN, CONNECTOR 3P	
CN611	♦:1-560-891-00	PIN, CONNECTOR 3P	
CN612	♦:1-560-896-00	PIN, CONNECTOR 8P	
CN613	♦:1-560-895-00	PIN, CONNECTOR 7P	
CN614	♦:1-560-897-00	PIN, CONNECTOR 9P	
CN615	♦:1-560-893-00	PIN, CONNECTOR 5P	

DIODE

D001	8-719-000-06	DIODE MC921
D002	8-719-911-19	DIODE 1SS119
D003	8-719-911-19	DIODE 1SS119
D004	8-719-911-19	DIODE 1SS119
D005	8-719-200-02	DIODE 10E2
D006	8-719-911-19	DIODE 1SS119
D007	8-719-911-19	DIODE 1SS119
D008	8-719-911-19	DIODE 1SS119
D009	8-719-911-19	DIODE 1SS119
D010	8-719-911-19	DIODE 1SS119
D011	8-719-911-19	DIODE 1SS119
D012	8-719-911-19	DIODE 1SS119
D303	⚠.8-719-100-57	DIODE RD10E-B2
D304	⚠.8-719-162-07	DIODE RD6.2E-B
D305	8-719-911-19	DIODE 1SS119
D306	8-719-000-04	DIODE MC911
D307	8-719-812-31	DIODE TLR123
D308	8-719-000-06	DIODE MC921
D309	8-719-911-19	DIODE 1SS119
D310	8-719-000-12	DIODE MC931
D311	8-719-000-06	DIODE MC921
D312	8-719-911-19	DIODE 1SS119
D313	8-719-911-19	DIODE 1SS119
D601	8-719-911-19	DIODE 1SS119

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
D602	8-719-000-06	DIODE MC921	
D603	8-719-911-19	DIODE 1SS119	
D604	8-719-911-19	DIODE 1SS119	
D605	8-719-911-19	DIODE 1SS119	
D606	8-719-911-19	DIODE 1SS119	
D607	8-719-911-19	DIODE 1SS119	
D608	8-719-911-19	DIODE 1SS119	

IC

Ref.No	Part No.	Description	Remark
IC001	8-759-135-80	IC UPC358C	
IC301	=>8-751-941-05	IC CX194B-5	
IC302	8-759-135-80	IC UPC358C	
IC303	8-759-145-58	IC UPC4558C	
IC304	8-759-132-40	IC UPC324C	
IC305	8-759-240-53	IC TC4053BP	
IC306	8-759-132-40	IC UPC324C	
IC307	8-759-240-53	IC TC4053BP	
IC601	8-759-910-55	IC MB88421-141M	
IC602	8-759-800-72	IC LA7205	

COIL

Ref.No	Part No.	Description	Remark
L601	1-408-418-00	MICRO INDUCTOR 56UH	

IC LINK

Ref.No	Part No.	Description	Remark
PS001⚠	1-532-637-11	LINK, IC (ICP-N25)	
PS002⚠	1-532-679-11	LINK, IC (ICP-N15)	
PS003⚠	1-532-605-11	LINK, IC (ICP-N10)	

TRANSISTOR

Ref.No	Part No.	Description	Remark
Q001	=>8-729-245-83	TRANSISTOR 2SC2458	
Q002	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q003	=>8-729-245-83	TRANSISTOR 2SC2458	
Q004	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q005	=>8-729-245-83	TRANSISTOR 2SC2458	
Q006	=>8-729-245-83	TRANSISTOR 2SC2458	
Q007	=>8-729-245-83	TRANSISTOR 2SC2458	
Q008	=>8-729-245-83	TRANSISTOR 2SC2458	
Q009	=>8-729-245-83	TRANSISTOR 2SC2458	
Q010	=>8-729-245-83	TRANSISTOR 2SC2458	
Q011	=>8-729-245-83	TRANSISTOR 2SC2458	
Q012	=>8-729-245-83	TRANSISTOR 2SC2458	
Q013	=>8-729-245-83	TRANSISTOR 2SC2458	
Q014	=>8-729-245-83	TRANSISTOR 2SC2458	
Q015	=>8-729-245-83	TRANSISTOR 2SC2458	
Q016	=>8-729-245-83	TRANSISTOR 2SC2458	
Q017	8-729-900-89	TRANSISTOR DTC144ES	
Q018	=>8-729-245-83	TRANSISTOR 2SC2458	
Q020	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q021	=>8-729-177-32	TRANSISTOR 2SD773	
Q022	=>8-729-245-83	TRANSISTOR 2SC2458	
Q023	8-729-900-36	TRANSISTOR DTC124ES	
Q024	=>8-729-245-83	TRANSISTOR 2SC2458	
Q025	=>8-729-245-83	TRANSISTOR 2SC2458	
Q026	=>8-729-245-83	TRANSISTOR 2SC2458	
Q027	=>8-729-245-83	TRANSISTOR 2SC2458	
Q028	8-729-374-02	TRANSISTOR 2SB740	
Q029	=>8-729-177-43	TRANSISTOR 2SD774	
Q030	8-729-374-02	TRANSISTOR 2SB740	
Q031	=>8-729-177-43	TRANSISTOR 2SD774	
Q032	=>8-729-245-83	TRANSISTOR 2SC2458	
Q033	=>8-729-245-83	TRANSISTOR 2SC2458	
Q034	=>8-729-245-83	TRANSISTOR 2SC2458	
Q035	=>8-729-245-83	TRANSISTOR 2SC2458	
Q036	=>8-729-245-83	TRANSISTOR 2SC2458	
Q037	=>8-729-245-83	TRANSISTOR 2SC2458	
Q038	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q301	=>8-729-177-43	TRANSISTOR 2SD774	
Q302	=>8-729-245-83	TRANSISTOR 2SC2458	
Q305	=>8-729-245-83	TRANSISTOR 2SC2458	
Q306	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q307	8-729-900-80	TRANSISTOR DTC114ES	
Q308	8-729-900-36	TRANSISTOR DTC124ES	
Q309	=>8-729-245-83	TRANSISTOR 2SC2458	
Q310	8-729-900-89	TRANSISTOR DTC144ES	
Q311	=>8-729-245-83	TRANSISTOR 2SC2458	
Q312	=>8-729-245-83	TRANSISTOR 2SC2458	
Q313	=>8-729-245-83	TRANSISTOR 2SC2458	
Q314	=>8-729-245-83	TRANSISTOR 2SC2458	
Q315	=>8-729-245-83	TRANSISTOR 2SC2458	
Q316	=>8-729-245-83	TRANSISTOR 2SC2458	
Q317	8-729-900-89	TRANSISTOR DTC144ES	
Q318	=>8-729-245-83	TRANSISTOR 2SC2458	
Q319	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q320	=>8-729-177-43	TRANSISTOR 2SD774	
Q321 ⚠	8-729-117-54	TRANSISTOR 2SA1175	
Q322 ⚠	8-729-805-13	TRANSISTOR 2SC1475-13	
Q323	=>8-729-245-83	TRANSISTOR 2SC2458	
Q324	=>8-729-245-83	TRANSISTOR 2SC2458	
Q325	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q326	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q327	=>8-729-245-83	TRANSISTOR 2SC2458	
Q328	=>8-729-245-83	TRANSISTOR 2SC2458	
Q330	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q601	=>8-729-245-83	TRANSISTOR 2SC2458	
Q602	8-729-900-89	TRANSISTOR DTC144ES	
Q603	8-729-900-89	TRANSISTOR DTC144ES	
Q604	=>8-729-177-43	TRANSISTOR 2SD774	
Q605	8-729-116-42	TRANSISTOR 2SD1164	
Q606	8-729-900-89	TRANSISTOR DTC144ES	
Q607	8-729-900-89	TRANSISTOR DTC144ES	
Q608	=>8-729-177-43	TRANSISTOR 2SD774	
Q609	8-729-116-42	TRANSISTOR 2SD1164	
Q610	8-729-900-89	TRANSISTOR DTC144ES	
Q611	=>8-729-245-83	TRANSISTOR 2SC2458	
Q612	=>8-729-245-83	TRANSISTOR 2SC2458	
Q613	=>8-729-245-83	TRANSISTOR 2SC2458	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark
Q614	8-729-900-89	TRANSISTOR DTC144ES	
Q615	8-729-987-42	TRANSISTOR 2SA874	
Q616	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q617	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q618	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q619	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q620	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q621	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q622	=>8-729-245-83	TRANSISTOR 2SC2458	
Q623	=>8-729-245-83	TRANSISTOR 2SC2458	
Q624	=>8-729-245-83	TRANSISTOR 2SC2458	
Q901	=>8-729-245-83	TRANSISTOR 2SC2458	

RESISTOR

Ref.No	Part No.	Description				Remark
R001	1-247-871-00	CARBON	47K	5%	1/6W	
R002	1-247-855-00	CARBON	10K	5%	1/6W	
R003	1-247-863-00	CARBON	22K	5%	1/6W	
R004	1-247-125-00	CARBON	560	5%	1/4W	
R005	1-247-128-00	CARBON	750	5%	1/4W	
R006	1-247-855-00	CARBON	10K	5%	1/6W	
R007	1-247-871-00	CARBON	47K	5%	1/6W	
R008	1-247-855-00	CARBON	10K	5%	1/6W	
R009	1-247-871-00	CARBON	47K	5%	1/6W	
R010	1-247-871-00	CARBON	47K	5%	1/6W	
R011	1-247-871-00	CARBON	47K	5%	1/6W	
R012	1-247-850-00	CARBON	6.2K	5%	1/6W	
R013	1-247-853-00	CARBON	8.2K	5%	1/6W	
R014	1-247-871-00	CARBON	47K	5%	1/6W	
R016	1-247-855-00	CARBON	10K	5%	1/6W	
R017	1-247-871-00	CARBON	47K	5%	1/6W	
R018	1-247-871-00	CARBON	47K	5%	1/6W	
R020	1-247-831-00	CARBON	1K	5%	1/6W	
R021	1-247-855-00	CARBON	10K	5%	1/6W	
R022	1-247-847-00	CARBON	4.7K	5%	1/6W	
R023	1-247-871-00	CARBON	47K	5%	1/6W	
R024	1-247-871-00	CARBON	47K	5%	1/6W	
R025	1-247-127-00	CARBON	680	5%	1/4W	
R026	1-247-879-00	CARBON	100K	5%	1/6W	
R027	1-247-855-00	CARBON	10K	5%	1/6W	
R028	1-247-831-00	CARBON	1K	5%	1/6W	
R031	1-247-875-00	CARBON	68K	5%	1/6W	
R032	1-247-871-00	CARBON	47K	5%	1/6W	
R033	⚠ 1-212-366-00	METAL OXIDE	3.3	5%	1W	F
R034	⚠ 1-247-819-00	CARBON	330	5%	1/6W	
R035	1-247-871-00	CARBON	47K	5%	1/6W	
R036	1-247-871-00	CARBON	47K	5%	1/6W	
R037	1-247-855-00	CARBON	10K	5%	1/6W	
R038	1-247-863-00	CARBON	22K	5%	1/6W	
R041	1-247-855-00	CARBON	10K	5%	1/6W	
R042	1-247-863-00	CARBON	22K	5%	1/6W	
R043	1-247-865-00	CARBON	27K	5%	1/6W	
R044	1-247-855-00	CARBON	10K	5%	1/6W	
R045	1-247-871-00	CARBON	47K	5%	1/6W	
R046	1-247-863-00	CARBON	22K	5%	1/6W	
R047	1-247-855-00	CARBON	10K	5%	1/6W	
R048	1-247-845-00	CARBON	3.9K	5%	1/6W	
R049	1-247-831-00	CARBON	1K	5%	1/6W	
R050	1-247-873-00	CARBON	56K	5%	1/6W	
R051	1-247-831-00	CARBON	1K	5%	1/6W	
R052	1-247-869-00	CARBON	39K	5%	1/6W	
R053	1-247-871-00	CARBON	47K	5%	1/6W	
R054	1-247-855-00	CARBON	10K	5%	1/6W	
R055	1-247-871-00	CARBON	47K	5%	1/6W	
R056	1-247-871-00	CARBON	47K	5%	1/6W	
R057	1-247-855-00	CARBON	10K	5%	1/6W	
R058	1-247-871-00	CARBON	47K	5%	1/6W	
R059	1-247-871-00	CARBON	47K	5%	1/6W	
R060	1-247-855-00	CARBON	10K	5%	1/6W	
R061	1-247-863-00	CARBON	22K	5%	1/6W	
R062	1-247-863-00	CARBON	22K	5%	1/6W	
R063	1-247-232-00	CARBON	470	5%	1/2W	
R064	1-247-849-00	CARBON	5.6K	5%	1/6W	
R065	1-247-831-00	CARBON	1K	5%	1/6W	
R066	⚠ 1-212-360-00	METAL OXIDE	1	5%	1W	F
R067	1-247-849-00	CARBON	5.6K	5%	1/6W	
R068	1-247-831-00	CARBON	1K	5%	1/6W	
R069	1-247-232-00	CARBON	470	5%	1/2W	
R070	1-247-855-00	CARBON	10K	5%	1/6W	
R071	1-247-863-00	CARBON	22K	5%	1/6W	
R072	1-247-863-00	CARBON	22K	5%	1/6W	
R073	1-247-871-00	CARBON	47K	5%	1/6W	
R075	1-247-863-00	CARBON	22K	5%	1/6W	
R076	1-247-871-00	CARBON	47K	5%	1/6W	
R077	1-247-821-00	CARBON	390	5%	1/6W	
R078	1-247-855-00	CARBON	10K	5%	1/6W	
R079	1-247-855-00	CARBON	10K	5%	1/6W	
R080	1-247-855-00	CARBON	10K	5%	1/6W	
R081	1-247-903-00	CARBON	1M	5%	1/6W	
R082	1-247-831-00	CARBON	1K	5%	1/6W	
R083	1-247-903-00	CARBON	1M	5%	1/6W	
R084	1-247-879-00	CARBON	100K	5%	1/6W	
R085	1-247-879-00	CARBON	100K	5%	1/6W	
R086	⚠ 1-206-640-00	METAL OXIDE	100	5%	2W	F
R316	1-247-871-00	CARBON	47K	5%	1/6W	
R317	1-247-863-00	CARBON	22K	5%	1/6W	
R318	1-247-863-00	CARBON	22K	5%	1/6W	
R319	1-247-871-00	CARBON	47K	5%	1/6W	
R320	1-247-871-00	CARBON	47K	5%	1/6W	
R321	1-247-859-00	CARBON	15K	5%	1/6W	
R322	1-247-857-00	CARBON	12K	5%	1/6W	

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When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R323	1-247-845-00	CARBON	3.9K	5%	1/6W	
R326	1-247-838-00	CARBON	2K	5%	1/6W	
R327	1-247-828-00	CARBON	750	5%	1/6W	
R328	1-247-847-00	CARBON	4.7K	5%	1/6W	
R329	1-247-855-00	CARBON	10K	5%	1/6W	
R330	⚠.1-212-360-00	METAL OXIDE	1	5%	1W	F
R331	⚠.1-212-849-00	FUSIBLE	4.7	5%	1/4W	F
R332	1-247-821-00	CARBON	390	5%	1/6W	
R333	⚠.1-212-855-00	FUSIBLE	8.2	5%	1/4W	F
R334	1-247-887-00	CARBON	220K	5%	1/6W	
R335	1-247-887-00	CARBON	220K	5%	1/6W	
R336	1-247-865-00	CARBON	27K	5%	1/6W	
R337	1-247-865-00	CARBON	27K	5%	1/6W	
R338	1-247-848-00	CARBON	5.1K	5%	1/6W	
R339	1-247-865-00	CARBON	27K	5%	1/6W	
R340	1-247-867-00	CARBON	33K	5%	1/6W	
R341	1-247-855-00	CARBON	10K	5%	1/6W	
R342	1-247-856-00	CARBON	11K	5%	1/6W	
R343	1-247-872-00	CARBON	51K	5%	1/6W	
R344	1-247-847-00	CARBON	4.7K	5%	1/6W	
R345	1-247-873-00	CARBON	56K	5%	1/6W	
R346	1-247-900-00	CARBON	750K	5%	1/6W	
R347	1-247-837-00	CARBON	1.8K	5%	1/6W	
R348	1-247-855-00	CARBON	10K	5%	1/6W	
R349	1-247-871-00	CARBON	47K	5%	1/6W	
R350	1-247-825-00	CARBON	560	5%	1/6W	
R351	1-247-842-00	CARBON	3K	5%	1/6W	
R352	1-247-843-00	CARBON	3.3K	5%	1/6W	
R353	⚠.1-212-850-00	FUSIBLE	5.1	5%	1/4W	F
R354	⚠.1-206-482-00	METAL OXIDE	62	5%	2W	F
R355	⚠.1-212-857-00	FUSIBLE	10	5%	1/4W	F
R356	1-247-859-00	CARBON	15K	5%	1/6W	
R357	1-247-823-00	CARBON	470	5%	1/6W	
R358	1-247-855-00	CARBON	10K	5%	1/6W	
R359	1-247-831-00	CARBON	1K	5%	1/6W	
R360	1-247-903-00	CARBON	1M	5%	1/6W	
R361	1-247-855-00	CARBON	10K	5%	1/6W	
R362	1-247-831-00	CARBON	1K	5%	1/6W	
R363	1-247-903-00	CARBON	1M	5%	1/6W	
R364	1-247-871-00	CARBON	47K	5%	1/6W	
R365	1-247-855-00	CARBON	10K	5%	1/6W	
R366	1-247-871-00	CARBON	47K	5%	1/6W	
R367	1-247-829-00	CARBON	820	5%	1/6W	
R368	1-247-880-00	CARBON	110K	5%	1/6W	
R369	1-247-839-00	CARBON	2.2K	5%	1/6W	
R370	1-247-839-00	CARBON	2.2K	5%	1/6W	
R373	1-247-891-00	CARBON	330K	5%	1/6W	
R374	1-247-891-00	CARBON	330K	5%	1/6W	
R375	1-247-863-00	CARBON	22K	5%	1/6W	

Ref.No	Part No.	Description				Remark
R376	1-247-849-00	CARBON	5.6K	5%	1/6W	
R377	1-247-855-00	CARBON	10K	5%	1/6W	
R378	1-247-835-00	CARBON	1.5K	5%	1/6W	
R379	1-247-855-00	CARBON	10K	5%	1/6W	
R380	1-247-819-00	CARBON	330	5%	1/6W	
R383	1-247-849-00	CARBON	5.6K	5%	1/6W	
R384	1-247-857-00	CARBON	12K	5%	1/6W	
R385	1-247-855-00	CARBON	10K	5%	1/6W	
R386	1-247-839-00	CARBON	2.2K	5%	1/6W	
R389	1-247-847-00	CARBON	4.7K	5%	1/6W	
R390	1-247-859-00	CARBON	15K	5%	1/6W	
R391	1-247-855-00	CARBON	10K	5%	1/6W	
R392	1-247-871-00	CARBON	47K	5%	1/6W	
R393	1-247-867-00	CARBON	33K	5%	1/6W	
R394	1-247-879-00	CARBON	100K	5%	1/6W	
R395	1-247-879-00	CARBON	100K	5%	1/6W	
R396	1-247-887-00	CARBON	220K	5%	1/6W	
R397	1-247-867-00	CARBON	33K	5%	1/6W	
R398	1-247-883-00	CARBON	150K	5%	1/6W	
R399	1-247-883-00	CARBON	150K	5%	1/6W	
R400	1-247-857-00	CARBON	12K	5%	1/6W	
R401	1-247-879-00	CARBON	100K	5%	1/6W	
R402	1-247-879-00	CARBON	100K	5%	1/6W	
R403	1-247-883-00	CARBON	150K	5%	1/6W	
R404	1-247-855-00	CARBON	10K	5%	1/6W	
R405	1-247-867-00	CARBON	33K	5%	1/6W	
R406	1-247-883-00	CARBON	150K	5%	1/6W	
R407	1-247-871-00	CARBON	47K	5%	1/6W	
R408	1-247-867-00	CARBON	33K	5%	1/6W	
R409	1-247-897-00	CARBON	560K	5%	1/6W	
R410	1-247-847-00	CARBON	4.7K	5%	1/6W	
R411	1-247-871-00	CARBON	47K	5%	1/6W	
R412	1-247-897-00	CARBON	560K	5%	1/6W	
R413	1-247-867-00	CARBON	33K	5%	1/6W	
R414	1-247-868-00	CARBON	36K	5%	1/6W	
R415	1-247-832-00	CARBON	1.1K	5%	1/6W	
R416	1-247-857-00	CARBON	12K	5%	1/6W	
R417	1-247-866-00	CARBON	30K	5%	1/6W	
R418	1-247-871-00	CARBON	47K	5%	1/6W	
R419	1-247-855-00	CARBON	10K	5%	1/6W	
R420	1-247-871-00	CARBON	47K	5%	1/6W	
R421	1-247-871-00	CARBON	47K	5%	1/6W	
R422	1-247-823-00	CARBON	470	5%	1/6W	
R423	1-247-847-00	CARBON	4.7K	5%	1/6W	
R424	⚠.1-212-360-00	METAL OXIDE	1	5%	1W	F
R426	1-247-871-00	CARBON	47K	5%	1/6W	
R427	1-247-855-00	CARBON	10K	5%	1/6W	
R428	1-247-879-00	CARBON	100K	5%	1/6W	
R429	1-247-871-00	CARBON	47K	5%	1/6W	

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Ref.No	Part No.	Description				Remark
R430	1-247-859-00	CARBON	15K	5%	1/6W	
R431	1-247-871-00	CARBON	47K	5%	1/6W	
R432	1-247-859-00	CARBON	15K	5%	1/6W	
R433	1-247-871-00	CARBON	47K	5%	1/6W	
R434	1-247-855-00	CARBON	10K	5%	1/6W	
R435	1-247-871-00	CARBON	47K	5%	1/6W	
R436	1-247-831-00	CARBON	1K	5%	1/6W	
R437	1-247-831-00	CARBON	1K	5%	1/6W	
R438	1-247-831-00	CARBON	1K	5%	1/6W	
R441	1-247-859-00	CARBON	15K	5%	1/6W	
R442	1-247-855-00	CARBON	10K	5%	1/6W	
R443	1-247-825-00	CARBON	560	5%	1/6W	
R444	1-247-871-00	CARBON	47K	5%	1/6W	
R445	1-247-855-00	CARBON	10K	5%	1/6W	
R446	1-247-847-00	CARBON	4.7K	5%	1/6W	
R447	1-247-839-00	CARBON	2.2K	5%	1/6W	
R448	1-247-855-00	CARBON	10K	5%	1/6W	
R449	1-247-855-00	CARBON	10K	5%	1/6W	
R601	1-247-831-00	CARBON	1K	5%	1/6W	
R602	1-247-871-00	CARBON	47K	5%	1/6W	
R603	1-247-869-00	CARBON	39K	5%	1/6W	
R604	1-247-862-00	CARBON	20K	5%	1/6W	
R605	1-247-862-00	CARBON	20K	5%	1/6W	
R606	1-247-873-00	CARBON	56K	5%	1/6W	
R607	1-247-869-00	CARBON	39K	5%	1/6W	
R608	1-247-829-00	CARBON	820	5%	1/6W	
R609	1-247-829-00	CARBON	820	5%	1/6W	
R610	1-247-869-00	CARBON	39K	5%	1/6W	
R611	1-247-829-00	CARBON	820	5%	1/6W	
R612	1-247-829-00	CARBON	820	5%	1/6W	
R613	1-247-869-00	CARBON	39K	5%	1/6W	
R614	1-247-869-00	CARBON	39K	5%	1/6W	
R615	1-247-827-00	CARBON	680	5%	1/6W	
R616	1-247-853-00	CARBON	8.2K	5%	1/6W	
R617	1-247-855-00	CARBON	10K	5%	1/6W	
R618	1-247-853-00	CARBON	8.2K	5%	1/6W	
R619	1-247-853-00	CARBON	8.2K	5%	1/6W	
R620	1-247-853-00	CARBON	8.2K	5%	1/6W	
R621	1-247-853-00	CARBON	8.2K	5%	1/6W	
R622	1-247-849-00	CARBON	5.6K	5%	1/6W	
R623	1-247-855-00	CARBON	10K	5%	1/6W	
R624	1-247-842-00	CARBON	3K	5%	1/6W	
R625	1-247-807-00	CARBON	100	5%	1/6W	
R626	1-247-873-00	CARBON	56K	5%	1/6W	
R627	1-247-863-00	CARBON	22K	5%	1/6W	
R628	1-247-809-00	CARBON	120	5%	1/6W	
R629	1-247-830-00	CARBON	910	5%	1/6W	
R630	1-247-863-00	CARBON	22K	5%	1/6W	
R631	1-247-855-00	CARBON	10K	5%	1/6W	
R632	1-247-839-00	CARBON	2.2K	5%	1/6W	
R633	1-247-839-00	CARBON	2.2K	5%	1/6W	
R634	1-247-839-00	CARBON	2.2K	5%	1/6W	
R635	1-247-839-00	CARBON	2.2K	5%	1/6W	
R636	1-247-839-00	CARBON	2.2K	5%	1/6W	
R637	1-247-839-00	CARBON	2.2K	5%	1/6W	

Ref.No	Part No.	Description				Remark
R638	1-247-855-00	CARBON	10K	5%	1/6W	
R639	1-247-855-00	CARBON	10K	5%	1/6W	
R640	1-247-855-00	CARBON	10K	5%	1/6W	
R641	1-247-855-00	CARBON	10K	5%	1/6W	
R642	1-247-855-00	CARBON	10K	5%	1/6W	
R643	1-247-829-00	CARBON	820	5%	1/6W	
R644	1-247-829-00	CARBON	820	5%	1/6W	
R645	1-247-829-00	CARBON	820	5%	1/6W	
R646	1-247-829-00	CARBON	820	5%	1/6W	
R647	1-247-829-00	CARBON	820	5%	1/6W	
R648	1-247-829-00	CARBON	820	5%	1/6W	
R649	1-247-829-00	CARBON	820	5%	1/6W	
R650	1-247-853-00	CARBON	8.2K	5%	1/6W	
R651	1-247-871-00	CARBON	47K	5%	1/6W	
R652	1-247-847-00	CARBON	4.7K	5%	1/6W	
R653	1-247-831-00	CARBON	1K	5%	1/6W	
R654	1-247-831-00	CARBON	1K	5%	1/6W	
R655	1-247-831-00	CARBON	1K	5%	1/6W	
R656	1-247-871-00	CARBON	47K	5%	1/6W	
R657	1-247-869-00	CARBON	39K	5%	1/6W	
R658	1-247-839-00	CARBON	2.2K	5%	1/6W	
R901	1-247-871-00	CARBON	47K	5%	1/6W	
R902	1-247-863-00	CARBON	22K	5%	1/6W	
R903	1-247-841-00	CARBON	2.7K	5%	1/6W	

VARIABLE RESISTOR

RV001	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV301	1-224-254-XX	RES, ADJ, METAL GLAZE 47K
RV302	1-228-750-00	RES, ADJ, CARBON 47K
RV303	1-228-750-00	RES, ADJ, CARBON 47K
RV304	1-228-991-00	RES, ADJ, METAL GLAZE 2.2K
RV305	1-228-750-00	RES, ADJ, CARBON 47K
RV306	1-228-994-00	RES, ADJ, METAL GLAZE 10K
RV307	1-228-994-00	RES, ADJ, METAL GLAZE 10K

THERMISTOR

TH002	1-800-202-XX	THERMISTOR S-10K
TH301	1-800-198-XX	THERMISTOR S-1K
TH302	1-800-200-00	THERMISTOR S-3K

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When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
	♠:1-612-323-12	FU-22 BOARD ************				
	♠:3-674-372-00	HOLDER (A), LED				
	♠:3-684-040-01	HOLDER (T), LED				
	♠:3-684-058-01	SPACER, LED				
		CONNECTOR				
CN301	♠:1-564-019-11	PIN, CONNECTOR 9P				
CN302	♠:1-564-017-00	PIN, CONNECTOR 7P				
		DIODE				
D301	8-719-812-31	DIODE TLR123				
D302	8-719-812-30	DIODE TLO123				
D303	8-719-812-32	DIODE TLY123				
D304	8-719-812-32	DIODE TLY123				
D305	8-719-812-33	DIODE TLG123A				
D306	8-719-812-30	DIODE TLO123				
D307	8-719-812-33	DIODE TLG123A				
D308	8-719-906-49	DIODE LT-9230N				
D309	8-719-812-33	DIODE TLG123A				
		RESISTOR				
R301	1-247-811-00	CARBON	150	5%	1/6W	
R302	1-247-817-00	CARBON	270	5%	1/6W	
R303	1-247-811-00	CARBON	150	5%	1/6W	
R304	1-247-807-00	CARBON	100	5%	1/6W	
R305	1-247-811-00	CARBON	150	5%	1/6W	
R306	1-247-811-00	CARBON	150	5%	1/6W	
R307	1-247-811-00	CARBON	150	5%	1/6W	
R308	1-247-811-00	CARBON	150	5%	1/6W	
R309	1-247-815-00	CARBON	220	5%	1/6W	
		VARIABLE RESISTOR				
RV301	1-228-988-00	RES, VAR, CARBON 10K/10K				
		SWITCH				
S301	1-553-997-00	SWITCH, KEY BOARD				
S302	1-553-997-00	SWITCH, KEY BOARD				
S303	1-553-997-00	SWITCH, KEY BOARD				
S304	1-553-997-00	SWITCH, KEY BOARD				
S305	1-553-997-00	SWITCH, KEY BOARD				
S306	1-553-997-00	SWITCH, KEY BOARD				
S307	1-553-997-00	SWITCH, KEY BOARD				
S308	1-553-997-00	SWITCH, KEY BOARD				

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Ref.No	Part No.	Description	Remark
	♠:1-610-400-00	MT-4 BOARD **********	
	⚠.1-463-350-12	TUNER (BT-881)	

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Ref.No	Part No.	Description				Remark
	♠:A-6721-201-A	TU-60 BOARD, COMPLETE **********************				
	♠:3-662-227-00	HOLDER (R-3), LED				
	♠:3-674-390-00	HOLDER (B), LED				
	♠:3-681-220-00	BAND, RETAINER, TUNER				
	♠:3-681-233-00	CASE, SHIELD (MAIN), TU				
	♠:3-684-073-01	LID, UPPER, TU SHIELD CASE (S)				
	♠:3-684-074-01	LID, BOTTOM, TU SHIELD CASE (S)				
C001	1-102-529-00	CERAMIC	100PF	5%	50V	
C002	1-102-527-00	CERAMIC	82PF	5%	50V	
C003	1-102-949-00	CERAMIC	12PF	5%	50V	
C004	1-102-523-00	CERAMIC	56PF	5%	50V	
C005	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C006	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C007	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C008	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C009	1-123-380-00	ELECT	1MF	20%	50V	
C010	1-123-356-00	ELECT	10MF	20%	16V	
C011	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C012	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C013	1-161-059-00	CERAMIC	0.047MF	20%	25V	
C014	1-102-529-00	CERAMIC	100PF	5%	50V	
C015	1-123-332-00	ELECT	47MF	20%	16V	
C016	1-101-004-00	CERAMIC	0.01MF		50V	
C017	1-102-979-00	CERAMIC	240PF	5%	50V	
C018	1-161-055-00	CERAMIC	0.022MF	20%	25V	
C019	1-123-380-00	ELECT	1MF	20%	50V	
C020	1-161-030-00	CERAMIC	0.0047MF	20%	25V	
C021	1-123-286-00	ELECT	0.33MF	20%	50V	
C022	1-161-032-00	CERAMIC	0.01MF	20%	25V	
C023	1-101-361-00	CERAMIC	150PF	10%	50V	
C024	1-123-380-00	ELECT	1MF	20%	50V	
C025	1-104-077-00	POLYSTYRENE	0.001MF	5%	50V	
C026	1-161-055-00	CERAMIC	0.022MF	20%	25V	
C027	1-161-055-00	CERAMIC	0.022MF	20%	25V	
C028	1-161-055-00	CERAMIC	0.022MF	20%	25V	
C029	1-130-478-00	MYLAR	0.0039MF	5%	50V	
C030	1-130-478-00	MYLAR	0.0039MF	5%	50V	
C031	1-130-478-00	MYLAR	0.0039MF	5%	50V	
C032	1-123-380-00	ELECT	1MF	20%	50V	
C033	1-123-330-00	ELECT	22MF	20%	16V	
C034	1-123-380-00	ELECT	1MF	20%	50V	
C036	1-123-332-00	ELECT	47MF	20%	16V	
C037	1-123-356-00	ELECT	10MF	20%	16V	
C038	1-123-356-00	ELECT	10MF	20%	16V	
C039	1-161-059-00	CERAMIC	0.047MF	20%	25V	
C040	1-104-089-00	POLYSTYRENE	0.0033MF	5%	50V	
C041	1-104-077-00	POLYSTYRENE	0.001MF	5%	50V	
C042	1-161-059-00	CERAMIC	0.047MF	20%	25V	
C043	1-161-055-00	CERAMIC	0.022MF	20%	25V	
C044	1-136-244-11	FILM	0.1MF	2%	50V	

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

TU-60

Ref.No	Part No.	Description			Remark
C045	1-136-244-11	FILM	0.1MF	2%	50V
C046	1-123-308-00	ELECT	220MF	20%	10V
C047	1-136-243-11	FILM	0.047MF	2%	50V
C048	1-136-243-11	FILM	0.047MF	2%	50V
C101	1-102-963-00	CERAMIC	33PF	10%	50V
C102	1-102-963-00	CERAMIC	33PF	10%	50V
C103	1-123-381-00	ELECT	2.2MF	20%	50V
C104	1-161-059-00	CERAMIC	0.047MF	20%	25V
C105	1-161-271-00	CERAMIC	100PF	5%	50V
C106	1-130-495-00	MYLAR	0.1MF	5%	50V
C107	1-130-493-00	MYLAR	0.068MF	5%	50V
C108	1-130-493-00	MYLAR	0.068MF	5%	50V
C109	1-102-963-00	CERAMIC	33PF	10%	50V
C110	1-123-356-00	ELECT	10MF	20%	16V
C111	1-101-004-00	CERAMIC	0.01MF		50V
C112	1-123-356-00	ELECT	10MF	20%	16V
C201	1-101-004-00	CERAMIC	0.01MF		50V
C202	1-123-332-00	ELECT	47MF	20%	16V
C203	1-123-332-00	ELECT	47MF	20%	16V
C204	1-101-004-00	CERAMIC	0.01MF		50V
C205	1-123-356-00	ELECT	10MF	20%	16V
C206	1-123-380-00	ELECT	1MF	20%	50V
C207	1-123-356-00	ELECT	10MF	20%	16V
C208	1-101-004-00	CERAMIC	0.01MF		50V
C209	1-101-004-00	CERAMIC	0.01MF		50V
C221	1-123-330-00	ELECT	22MF	20%	16V
C405	1-101-880-00	CERAMIC	47PF	5%	50V

FILTER

Ref.No	Part No.	Description
CF001	1-527-840-00	FILTER, CERAMIC
CF002	1-527-839-00	FILTER, CERAMIC
CF101	1-527-822-00	OSCILLATOR, CERAMIC

CONNECTOR

Ref.No	Part No.	Description
CN001●:	1-560-893-00	PIN, CONNECTOR 5P
CN002●:	1-560-892-00	PIN, CONNECTOR 4P
CN003●:	1-560-892-00	PIN, CONNECTOR 4P
CN101●:	1-560-900-00	PIN, CONNECTOR 12P
CN102●:	1-560-892-00	PIN, CONNECTOR 4P
CN201●:	1-560-892-00	PIN, CONNECTOR 4P

TRIMMER

Ref.No	Part No.	Description
CT001	1-404-134-00	TRAP, CERAMIC (5.5MHZ)

DIODE

Ref.No	Part No.	Description
D001	8-719-911-19	DIODE 1SS119
D102	8-719-911-19	DIODE 1SS119
D103	8-719-812-31	DIODE TLR123
D104	8-719-812-31	DIODE TLR123
D105	8-719-812-31	DIODE TLR123
D106	8-719-812-32	DIODE TLY123
D107	8-719-812-33	DIODE TLG123A
D201	8-719-000-12	DIODE MC931

IC

Ref.No	Part No.	Description
IC001	8-759-909-08	IC TDA3541
IC002	8-759-909-54	IC TDA2546A
IC003	6-066-721-70	IC TDA3800GS
IC004	8-759-145-58	IC UPC4558C
IC101	8-759-602-05	IC M50160-019SP
IC102	8-759-600-66	IC M58653P
IC103	8-759-600-15	IC M54570L
IC201	8-759-157-40	IC UPC574J

COIL

Ref.No	Part No.	Description
L001	1-408-592-00	MICRO INDUCTOR 1.2UH
L002	1-408-591-00	MICRO INDUCTOR 1UH
L003	1-408-591-00	MICRO INDUCTOR 1UH
L004	1-408-600-00	MICRO INDUCTOR 5.6UH
L005	1-408-599-00	MICRO INDUCTOR 4.7UH
L006	1-408-597-00	MICRO INDUCTOR 3.3UH
L007	1-408-591-00	MICRO INDUCTOR 1UH
L008	1-408-591-00	MICRO INDUCTOR 1UH

TRANSISTOR

Ref.No	Part No.	Description
Q001	=>8-729-203-28	TRANSISTOR 2SC2216
Q002	=>8-729-245-83	TRANSISTOR 2SC2458
Q003	8-729-900-74	TRANSISTOR DTC143TS
Q004	8-729-900-74	TRANSISTOR DTC143TS
Q101	=>8-729-245-83	TRANSISTOR 2SC2458
Q102	=>8-729-245-83	TRANSISTOR 2SC2458
Q103	8-729-900-89	TRANSISTOR DTC144ES
Q201	8-729-900-89	TRANSISTOR DTC144ES
Q202	8-729-103-43	TRANSISTOR 2SB734
Q203	8-729-900-89	TRANSISTOR DTC144ES
Q404	8-729-900-80	TRANSISTOR DTC114ES

RESISTOR

Ref.No	Part No.	Description			Remark
R001	1-247-819-00	CARBON	330	5%	1/6W
R002	1-247-847-00	CARBON	4.7K	5%	1/6W
R003	1-247-839-00	CARBON	2.2K	5%	1/6W
R004	1-247-815-00	CARBON	220	5%	1/6W
R005	1-247-813-00	CARBON	180	5%	1/6W
R006	1-247-869-00	CARBON	39K	5%	1/6W

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description				Remark
R009	1-247-843-00	CARBON	3.3K	5%	1/6W	
R010	1-247-853-00	CARBON	8.2K	5%	1/6W	
R011	1-247-879-00	CARBON	100K	5%	1/6W	
R012	1-247-871-00	CARBON	47K	5%	1/6W	
R013	1-247-871-00	CARBON	47K	5%	1/6W	
R014	1-247-831-00	CARBON	1K	5%	1/6W	
R015	1-247-813-00	CARBON	180	5%	1/6W	
R016	1-247-824-00	CARBON	510	5%	1/6W	
R017	1-247-821-00	CARBON	390	5%	1/6W	
R018	1-247-823-00	CARBON	470	5%	1/6W	
R019	1-247-835-00	CARBON	1.5K	5%	1/6W	
R020	1-247-829-00	CARBON	820	5%	1/6W	
R021	1-247-829-00	CARBON	820	5%	1/6W	
R022	1-247-829-00	CARBON	820	5%	1/6W	
R023	1-247-847-00	CARBON	4.7K	5%	1/6W	
R024	1-247-853-00	CARBON	8.2K	5%	1/6W	
R025	1-247-841-00	CARBON	2.7K	5%	1/6W	
R026	1-247-841-00	CARBON	2.7K	5%	1/6W	
R027	1-247-853-00	CARBON	8.2K	5%	1/6W	
R030	1-247-861-00	CARBON	18K	5%	1/6W	
R031	1-247-865-00	CARBON	27K	5%	1/6W	
R032	1-247-829-00	CARBON	820	5%	1/6W	
R033	1-215-461-00	METAL	47K	1%	1/6W	
R034	1-215-409-00	METAL	330	1%	1/6W	
R035	1-215-487-00	METAL	560K	1%	1/6W	
R036	1-247-831-00	CARBON	1K	5%	1/6W	
R037	1-215-460-00	METAL	43K	1%	1/6W	
R038	1-215-408-00	METAL	300	1%	1/6W	
R039	1-215-486-00	METAL	510K	1%	1/6W	
R040	1-247-831-00	CARBON	1K	5%	1/6W	
R041	1-247-147-00	CARBON	4.7K	5%	1/4W	
R042	1-247-841-00	CARBON	2.7K	5%	1/6W	
R101	1-247-163-00	CARBON	22K	5%	1/4W	
R102	1-247-163-00	CARBON	22K	5%	1/4W	
R103	1-247-163-00	CARBON	22K	5%	1/4W	
R104	1-247-155-00	CARBON	10K	5%	1/4W	
R105	1-247-155-00	CARBON	10K	5%	1/4W	
R106	1-247-155-00	CARBON	10K	5%	1/4W	
R107	1-247-155-00	CARBON	10K	5%	1/4W	
R108	1-247-155-00	CARBON	10K	5%	1/4W	
R109	1-247-155-00	CARBON	10K	5%	1/4W	
R111	1-247-130-00	CARBON	910	5%	1/4W	
R112	1-247-130-00	CARBON	910	5%	1/4W	
R113	1-247-163-00	CARBON	22K	5%	1/4W	
R114	1-247-163-00	CARBON	22K	5%	1/4W	
R115	1-247-163-00	CARBON	22K	5%	1/4W	
R116	1-247-163-00	CARBON	22K	5%	1/4W	
R117	1-247-163-00	CARBON	22K	5%	1/4W	
R118	1-247-891-00	CARBON	330K	5%	1/6W	
R119	1-247-839-00	CARBON	2.2K	5%	1/6W	
R120	1-247-155-00	CARBON	10K	5%	1/4W	
R121	1-247-839-00	CARBON	2.2K	5%	1/6W	
R122	1-247-135-00	CARBON	1.5K	5%	1/4W	
R123	1-247-133-00	CARBON	1.2K	5%	1/4W	
R124	1-247-179-00	CARBON	100K	5%	1/4W	
R125	1-247-163-00	CARBON	22K	5%	1/4W	
R128	1-247-853-00	CARBON	8.2K	5%	1/6W	
R201	1-247-167-00	CARBON	33K	5%	1/4W	
R202	1-247-863-00	CARBON	22K	5%	1/6W	
R203	1-247-847-00	CARBON	4.7K	5%	1/6W	
R204	1-247-831-00	CARBON	1K	5%	1/6W	
R206	1-247-843-00	CARBON	3.3K	5%	1/6W	
R207	1-247-851-00	CARBON	6.8K	5%	1/6W	
R208 ⚠	1-206-670-00	METAL OXIDE	1.8K	5%	2W	F
R209	1-247-167-00	CARBON	33K	5%	1/4W	
R210	1-247-163-00	CARBON	22K	5%	1/4W	
R221	1-247-839-00	CARBON	2.2K	5%	1/6W	
R222	1-247-863-00	CARBON	22K	5%	1/6W	
R223	1-247-871-00	CARBON	47K	5%	1/6W	
R224	1-247-891-00	CARBON	330K	5%	1/6W	

VARIABLE RESISTOR

Ref.No	Part No.	Description
RV001	1-228-750-00	RES, ADJ, CARBON 47K
RV002	1-228-995-00	RES, ADJ, METAL GLAZE 22K

SWITCH

Ref.No	Part No.	Description
S101	1-553-997-00	SWITCH, KEY BOARD
S102	1-553-997-00	SWITCH, KEY BOARD
S103	1-553-997-00	SWITCH, KEY BOARD
S104	1-553-997-00	SWITCH, KEY BOARD
S105	1-553-997-00	SWITCH, KEY BOARD
S106	1-553-997-00	SWITCH, KEY BOARD
S107	1-553-997-00	SWITCH, KEY BOARD
S201	1-516-226-00	SLIDE SWITCH

FILTER

Ref.No	Part No.	Description
SWF001	1-404-438-00	FILTER, SAW

TRANSFORMER

Ref.No	Part No.	Description
T002	1-404-068-00	COIL, VIF
T003	1-404-068-00	COIL, VIF
T004	1-404-378-00	I.F.T
T005	1-404-378-00	I.F.T
T006	1-404-135-00	COIL, SIF DISCRI
T007	1-404-378-00	I.F.T
T008	1-404-135-00	COIL, SIF DISCRI
T009	1-404-343-00	COIL, IF

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
	♠:1-612-327-11	TR-14 BOARD ************	
		VARIABLE RESISTOR	
RV701	1-228-603-00	RES, VAR, CARBON 100K	

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Ref.No	Part No.	Description	Remark
	♠:1-609-227-11	CS-3 BOARD ***********	
		CONNECTOR	
CN301	♠:1-564-029-00	PIN, CONNECTOR 4P	
		SWITCH	
S301	1-554-241-00	SWITCH, LEVER	

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Ref.No	Part No.	Description	Remark
	♠:1-609-228-11	CS-4 BOARD ***********	
		SWITCH	
S302	1-554-241-00	SWITCH, LEVER	

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Ref.No	Part No.	Description	Remark
	♠:1-610-401-00	RD-6 BOARD ***********	
	♠:3-681-157-00	HOLDER, RD	
		DIODE	
D001	=>8-719-921-03	DIODE GP-2S02B	

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Ref.No	Part No.	Description	Remark
	♠:1-610-402-00	RD-7 BOARD ***********	
		DIODE	
D001	=>8-719-921-03	DIODE GP-2S02B	

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Ref.No	Part No.	Description	Remark
	♠:1-612-324-11	HP-7 BOARD ***********	
		JACK	
JK401	1-507-833-00	JACK	

Ref.No	Part No.	Description			Remark
	♠:1-612-330-12	RL-18 BOARD ************			
		CAPACITOR			
C801	1-123-356-00	ELECT	10MF	20%	16V
C802	1-123-356-00	ELECT	10MF	20%	16V
C803	1-161-039-00	CERAMIC	0.001MF	10%	25V
C804	1-161-039-00	CERAMIC	0.001MF	10%	25V
C805	1-123-356-00	ELECT	10MF	20%	16V
		CONNECTOR			
CN801	♠:1-564-017-00	PIN, CONNECTOR 7P			
CN802	♠:1-564-022-00	PIN, CONNECTOR 12P			
CN803	♠:1-564-017-00	PIN, CONNECTOR 7P			
		DIODE			
D801	8-719-911-19	DIODE 1SS119			
D802	8-719-911-19	DIODE 1SS119			
		IC			
IC801	8-759-135-80	IC UPC358C			
		RESISTOR			
R801	1-247-855-00	CARBON	10K	5%	1/6W
R802	1-247-855-00	CARBON	10K	5%	1/6W
R803	1-247-852-00	CARBON	7.5K	5%	1/6W
R804	1-247-852-00	CARBON	7.5K	5%	1/6W
R805	1-247-878-00	CARBON	91K	5%	1/6W
R806	1-247-878-00	CARBON	91K	5%	1/6W
R807	1-247-861-00	CARBON	18K	5%	1/6W
R808	1-247-861-00	CARBON	18K	5%	1/6W
R809	1-247-220-00	CARBON	150	5%	1/2W
R810	1-247-879-00	CARBON	100K	5%	1/6W
R811	1-247-791-00	CARBON	22	5%	1/6W
R812	1-247-879-00	CARBON	100K	5%	1/6W
R813	1-247-791-00	CARBON	22	5%	1/6W

****

Ref.No	Part No.	Description			Remark
	♠:A-6728-995-A	TM-54 BOARD, COMPLETE **********************			
		CAPACITOR			
C101	1-123-382-00	ELECT	3.3MF	20%	50V
C102	1-161-025-00	CERAMIC	0.1MF	10%	25V
C103	1-161-061-00	CERAMIC	0.068MF	10%	50V
C104	1-161-025-00	CERAMIC	0.1MF	10%	25V
C105	1-125-299-00	************	47000MF		5.5V
C106	1-123-357-00	ELECT	22MF	20%	50V
C107	1-102-959-00	CERAMIC	22PF	5%	50V
C108	1-123-318-00	ELECT	33MF	20%	16V
C109	1-161-024-00	CERAMIC	0.082MF	10%	25V
		CONNECTOR			
CN102	♠:1-564-002-00	PIN, CONNECTOR 3P			
CN104	♠:1-564-006-11	PIN, CONNECTOR 7P			
CN106	♠:1-564-027-00	PIN, CONNECTOR 2P			

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark
		TRIMMER	
CT101	1-141-022-21	CAP, TRIMMER, CERAMIC 20PF	
		DIODE	
D101	8-719-812-31	DIODE TLR123	
D102	8-719-911-19	DIODE 1SS119	
D103	8-719-911-19	DIODE 1SS119	
D104	8-719-191-07	DIODE RD9.1E-B	
D105	8-719-911-19	DIODE 1SS119	
D106	8-719-911-19	DIODE 1SS119	
D107	8-719-911-19	DIODE 1SS119	
		IC	
IC101	8-759-103-16	IC UPD7519G-132	
		TRANSISTOR	
Q101	=>8-729-245-83	TRANSISTOR 2SC2458	
Q102	=>8-729-245-83	TRANSISTOR 2SC2458	
Q103	=>8-729-204-83	TRANSISTOR 2SA1048-GR	
Q104	=>8-729-245-83	TRANSISTOR 2SC2458	
		RESISTOR	
R101	1-247-875-00	CARBON 68K 5% 1/6W	
R102	1-247-879-00	CARBON 100K 5% 1/6W	
R103	1-247-855-00	CARBON 10K 5% 1/6W	
R104	1-247-855-00	CARBON 10K 5% 1/6W	
R105	1-247-855-00	CARBON 10K 5% 1/6W	
R106	1-247-855-00	CARBON 10K 5% 1/6W	
R107	1-247-855-00	CARBON 10K 5% 1/6W	
R108	1-247-855-00	CARBON 10K 5% 1/6W	
R109	1-247-855-00	CARBON 10K 5% 1/6W	
R110	1-247-855-00	CARBON 10K 5% 1/6W	
R111	1-247-855-00	CARBON 10K 5% 1/6W	
R112	1-247-867-00	CARBON 33K 5% 1/6W	
R113	1-247-872-00	CARBON 51K 5% 1/6W	
R114	1-247-886-00	CARBON 200K 5% 1/6W	
R115	1-247-903-00	CARBON 1M 5% 1/6W	
R116	1-247-868-00	CARBON 36K 5% 1/6W	
R117	1-247-874-00	CARBON 62K 5% 1/6W	
R118	1-247-869-00	CARBON 39K 5% 1/6W	
R119	1-247-879-00	CARBON 100K 5% 1/6W	
R120	1-247-855-00	CARBON 10K 5% 1/6W	
R121	1-247-867-00	CARBON 33K 5% 1/6W	
R122	1-247-863-00	CARBON 22K 5% 1/6W	
R123	1-247-831-00	CARBON 1K 5% 1/6W	
R124	1-247-843-00	CARBON 3.3K 5% 1/6W	
R125	1-247-879-00	CARBON 100K 5% 1/6W	
R126	1-247-879-00	CARBON 100K 5% 1/6W	
R127	1-247-879-00	CARBON 100K 5% 1/6W	
R128	1-247-879-00	CARBON 100K 5% 1/6W	
R129	1-247-804-00	CARBON 75 5% 1/6W	

Ref.No	Part No.	Description	Remark
		CRYSTAL	
X101	1-527-647-00	OSCILLATOR, CRYSTAL	

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♦:A-6728-996-A TM-55 BOARD, COMPLETE
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Ref.No	Part No.	Description	Remark
	♦:3-684-005-01	HOLDER (S), LED	
	♦:3-684-030-01	HOLDER, INDICATION TUBE	
	7-685-134-14	SCREW +P 2.6X8 TYPE2 NON-SLIT	
		DIODE	
D201	8-719-812-31	DIODE TLR123	
D202	8-719-812-31	DIODE TLR123	
D203	8-719-812-31	DIODE TLR123	
D204	8-719-812-31	DIODE TLR123	
		INDICATOR TUBE	
FL201	1-519-315-11	INDICATOR TUBE, FLUORESCENT	
		RESISTOR	
R201	1-247-815-00	CARBON 220 5% 1/6W	
R202	1-247-815-00	CARBON 220 5% 1/6W	
		SWITCH	
S201	1-553-997-00	SWITCH, KEY BOARD	
S202	1-553-997-00	SWITCH, KEY BOARD	
S203	1-553-997-00	SWITCH, KEY BOARD	
S204	1-553-997-00	SWITCH, KEY BOARD	
S205	1-553-997-00	SWITCH, KEY BOARD	
S206	1-553-997-00	SWITCH, KEY BOARD	
S207	1-553-997-00	SWITCH, KEY BOARD	
S208	1-553-997-00	SWITCH, KEY BOARD	
S209	1-553-997-00	SWITCH, KEY BOARD	
S210	1-553-997-00	SWITCH, KEY BOARD	
S211	1-553-997-00	SWITCH, KEY BOARD	
S212	1-553-997-00	SWITCH, KEY BOARD	
S213	1-553-997-00	SWITCH, KEY BOARD	
S214	1-553-997-00	SWITCH, KEY BOARD	
S215	1-554-375-00	SWITCH, PUSH	

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♦:1-612-325-11 SV-12 BOARD
****

Ref.No	Part No.	Description	Remark
		SLIDE RES VAR	
RV501	1-230-414-11	RES, VAR, SLIDE 20K/20K	

****

When indicating parts by reference number, please include the board name.

SW-31 N LM-8 DM-10

Ref.No	Part No.	Description				Remark
	●:1-612-326-12	SW-31 BOARD ************				
		DIODE				
D601	8-719-911-19	DIODE 1SS119				
		RESISTOR				
R601	1-247-807-00	CARBON	100	5%	1/6W	
		SWITCH				
S601	1-553-754-00	SWITCH, SLIDE				
S602	1-553-716-00	SWITCH, SLIDE				
S603	1-553-716-00	SWITCH, SLIDE				
S604	1-553-716-00	SWITCH, SLIDE				
S605	1-553-716-00	SWITCH, SLIDE				
S606	1-553-716-00	SWITCH, SLIDE				

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Ref.No	Part No.	Description				Remark
	●:1-606-794-00	N BOARD ********				
		CAPACITOR				
C001	1-123-617-00	ELECT	10MF	20%	16V	
C002	1-123-617-00	ELECT	10MF	20%	16V	
C003	1-123-617-00	ELECT	10MF	20%	16V	
C004	1-161-057-00	CERAMIC	0.033MF	10%	25V	
C005	1-106-184-00	MYLAR	0.0033MF	5%	50V	
C006	1-123-821-00	ELECT	47MF	20%	16V	
		DIODE				
D001	8-719-110-32	DIODE PH302B				
		IC				
IC001	=>8-759-102-84	IC UPC1373HA				
		COIL				
L001	1-404-310-00	COIL				

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Ref.No	Part No.	Description				Remark
	●:1-605-071-00	LM-8 BOARD ***********				
		CAPACITOR				
C101	1-161-057-00	CERAMIC	0.033MF	10%	50V	
C102	1-161-057-00	CERAMIC	0.033MF	10%	50V	
		COIL				
L101	1-408-120-00	MICRO INDUCTOR 18UH				
L102	1-408-120-00	MICRO INDUCTOR 18UH				
		RESISTOR				
R101	⚠1-206-640-00	METAL OXIDE	100	5%	2W	F

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Ref.No	Part No.	Description				Remark
	●:1-612-960-12	DM-10 BOARD ***********				
		CAPACITOR				
C301	1-108-583-00	MYLAR	0.015MF	5%	50V	
C302	1-108-563-00	MYLAR	0.0022MF	5%	50V	
C303	1-108-602-00	MYLAR	0.091MF	5%	50V	
C304	1-101-005-00	CERAMIC	0.022MF		50V	
C305	1-108-583-00	MYLAR	0.015MF	5%	50V	
C306	1-108-563-00	MYLAR	0.0022MF	5%	50V	
C307	1-108-602-00	MYLAR	0.091MF	5%	50V	
C308	1-101-005-00	CERAMIC	0.022MF		50V	
		COIL				
L301	1-407-177-XX	MICRO INDUCTOR 470UH				
L302	1-407-177-XX	MICRO INDUCTOR 470UH				
		TRANSISTOR				
Q301	8-729-178-54	TRANSISTOR 2SC2785				
Q302	8-729-178-54	TRANSISTOR 2SC2785				
		RESISTOR				
R301	1-247-824-00	CARBON	510	5%	1/6W	
R302	1-247-835-00	CARBON	1.5K	5%	1/6W	
R303	1-247-843-00	CARBON	3.3K	5%	1/6W	
R304	1-247-848-00	CARBON	5.1K	5%	1/6W	
R305	1-247-824-00	CARBON	510	5%	1/6W	
R306	1-247-835-00	CARBON	1.5K	5%	1/6W	
R307	1-247-843-00	CARBON	3.3K	5%	1/6W	
R308	1-247-848-00	CARBON	5.1K	5%	1/6W	

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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

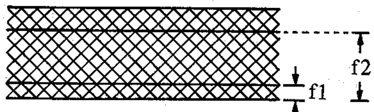
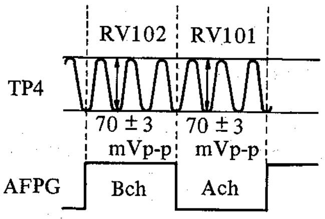
When indicating parts by reference number, please include the board name.

AF-3 Board Adjustment after replacement

This adjustment should be performed when the AF-3 board whose end of part No. is -13 has been replaced with the board whose end of part No. is -14 or -15.

Adjustment Method on AF-3 Board Replacement

Note: ● Set the LPF switch to OFF. ● Set the BETA Hi-Fi switch to AUTO. ● ( ) is Rch.

Adjustment Method	Mode	Input Signal	Output Signal	Equipment Required	Standard	Adjustment Point
1. E-E Input Level Adjustment	REC	● Set the REC level control volume to the center click position. ● Input a −10dBs, 400Hz signal to the AUDIO IN.	TP006 (TP007) on AF-3 board	Audio Level Meter	−26.5 ±0.1dB	AF-3 Board RV022 (RV023)
2. Level Meter Adjustment	REC	● Set the REC level control volume to the center click position. ● Input a −10dBs, 400Hz signal to the AUDIO IN.	● Connect a digital voltmeter to pin ④ (pin ⑤) of level meter. ● Adjust the voltage with RV020 (RV021) on AF-3 board. ● Confirm that the LEDs from first to seventh light up. ● Confirm that the LEDs light up and go off correctly when the level display sw is turned on and off.	Digital Voltmeter	1.75 ±0.05V	AF-3 Board RV020 (RV021)
3. AFM Record Current Adjustment	REC	● Set up the unit a no signal state. ● Set the REC LEVEL control volume to 0 position.	● Connect an oscilloscope to pin ⑤ of CN103 on RP-17 board.  f1: adjust with RV017 f2: adjust with RV015	oscilloscope	f1: 55 ±2mVp-p f2: 200 ±5mVp-p	AF-3 Board RV017 (RV015)
4. RF Input Level Adjustment Note: Make this adjustment after the AFM record current adjustment has been performed.	REC/PB	● Set the tracking control volume to the center click position. ● Record with no signal input and playback the recorded part. (no modulation)	● Connect an oscilloscope to TP004 on AF-3 board. ● Adjust RV101 for Ach and RV102 for Bch on RP-17 board.  RV102 RV101 TP4 70 ±3 mVp-p 70 ±3 mVp-p AFPG Bch Ach	oscilloscope	70 ±3mVp-p	RP-17 Board RV101 RV102

CORRECTION

ADJUSTMENT

☛ : Corrected portion

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1) Drum Free Speed Adjustment (SS-28 Board)

[Alignment method]

Adjust to 500 μsec ± 10 μsec with RV301. (See Fig. 5-7.)

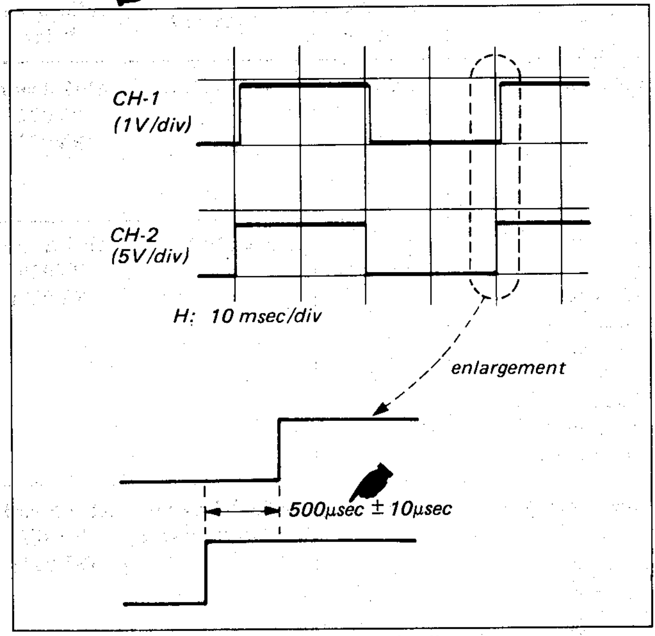

Fig. 5-7. Drum free speed adjustment

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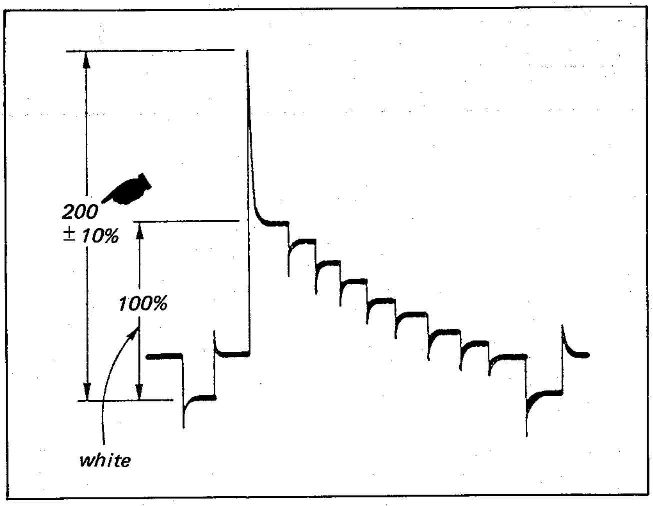
7) White Clip Adjustment (YC-28 Board)
Mode: E-E
Signal: GRAY SCALE
Digital voltmeter: Collector of Q038

[Adjustment method]

Adjust RV013 so that white overshoot becomes 200% ±10%.



8) Y Record Current Adjustment (RP-17 Board)
Mode: Record
Signal: None
Oscilloscope: Pin ① of CN001 (The last digits of the part number of RP-17 board is -11.)
TP001 (The last digits of the part number of RP-17 board is -12.)

[Adjustment method]

Adjust to 3.2V ±0.05Vp-p with RV003. (See Fig. 5-19)

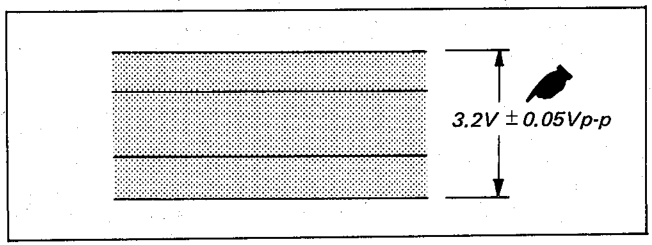


Fig. 5-19. Y record current adjustment

10) AFC Adjustment (YC-28 Board)

[Adjustment method]

i) Rotate RV001 counterclockwise full seen from the pattern side.

ii) Adjust to 4.5 ±0.1 V dc using RV007. (See Fig. 5-20)

iii) Check the frequency of IC006 pin ㉑ (VCO output) by a frequency counter, and confirm that the frequency is the same as shown below.

5484375Hz . . . when CN008 pin ② is "L"
5515625Hz . . . when CN008 pin ② is "H"

Note: Make sure to adjust SECAM ACK after completing this adjustment. (Refer to 2) on page 54.)

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13) Chroma Record Current Adjustment (YC-28 Board)

[Adjustment method]

Adjust to 165mVp-p ±5mVp-p with RV008. (See Fig. 5-23.)

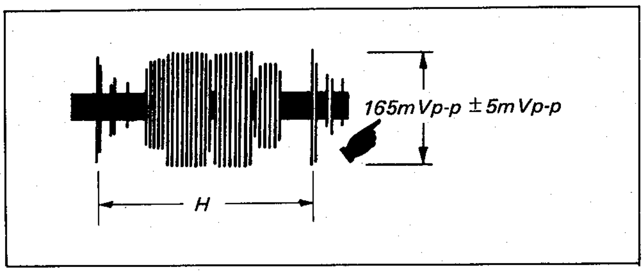

Fig. 5-23. Chroma record current adjustment

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1) Playback Frequency Characteristic Adjustment (RP-17 Board)

[Adjustment method]

i) Rotate the tracking knob to make 2 MHz to be maximum.
ii) Rotate RV004 to adjust the 2 MHz level of Bch to be less than ±20 mV to the 2 MHz level of Ach.
iii) Set the trigger slope to −(+).
iv) Adjust the 5.2MHz amplitude to 56 – 62% of the 2MHz amplitude with RV002 (RV001).

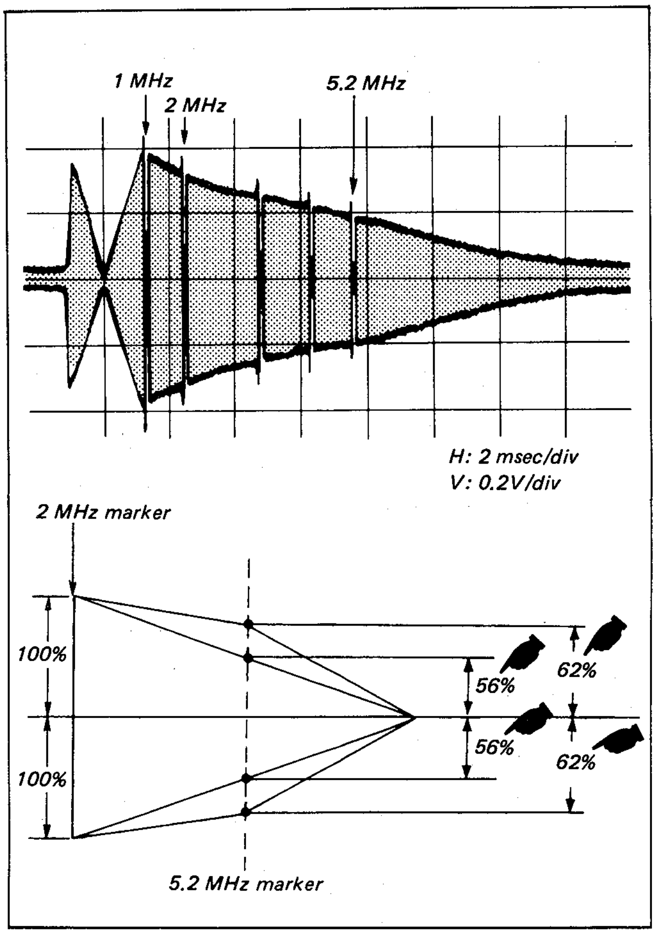

Fig. 5-24. Playback amplifier frequency characteristic adjustment

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2) Expand Adjustment (YC-28 Board)

[Adjustment method]

Adjust to 0.45 ±0.01V dc using RV020.

Note: Adjust more than 30sec after turning on the power switch.

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5-6-1. Normal Audio System Adjustment (AM-5 Board)

Note: Set the BETA HI-FI switch to NORM.

[Adjustment method]

1. ACE head adjustment... See "Mechanical Adjustment"
2. Playback frequency characteristic adjustment
3. Playback output level adjustment
4. Bias oscillator check
5. Record current adjustment
6. Record bias adjustment
7. Overall frequency characteristic check
8. AGC output check
9. Overall S/N check
10. Overall distortion check

5. Record Bias Adjustment

6. Record Current Adjustment

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5-6-2. BETA Hi-Fi Audio System Adjustment (AF-3 Board)

Note: Set the LPF switch to OFF.
Set the BETA hi-fi switch to AUTO.
( ) is Rch.

[Adjustment method]

1. E-E input level adjustment
2. Dynamic emphasis adjustment
3. AFM carrier frequency adjustment
4. AFM record current adjustment
5. Level meter level adjustment
6. RF input level adjustment
7. Playback level adjustment
8. Playback level balance adjustment
9. AFM deviation adjustment
10. Overall frequency characteristic check
11. Overall distortion check
12. Overall S/N check

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4. AFM Record Current Adjustment

5. Level Meter Adjustment

6. RF Input Level Adjustment

NOTE: Make this adjustment after checking that the AFM record current has been adjusted.
Tracking control knob: center click position.

7. Playback Level Adjustment

8. Playback Ach and Bch Level Balance Adjustment

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9. AFM Deviation Adjustment